FILE NOTATIONS

Entered in N I D File	✓	Checked by Chief	✓
Entered On S R Sheet		Copy N I D to Field Office	
Location Map Pinned		Approval Letter	✓
Card Indexed	✓	Disapproval Letter	
I W R for State or Fee Land	[redacted]		

COMPLETION DATA:

Date Well Completed		Location Inspected	
OW ✓ WW	TA	Bond released State of Fee Land	
GW OS	PA		

LOGS FILED

Driller's Log

Electric Logs (No.) 2

E ✓ I E-I GR GR-N Micro

Lat Mi-L Sonic Others Radioactivity Log

Form 9-331a
(March 1942)

Budget Bureau No. 42-R358.
Approval expires 11-30-46.

(SUBMIT IN TRIPLICATE)

Land Office Salt Lake City
Lease No. 06752
Unit Bishop Springs

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ORIGINAL FORWARDED TO CASPER

RECEIVED
OCT 1 - 1951
GEOLOGICAL SURVEY
SALT LAKE CITY, UTAH

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	X	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Bishop Springs Unit September 18, 19 51

(See letter and map attached)

Well No. 1 is located ____ ft. from {N/S} line and ____ ft. from {E/W} line of sec. ____
6612.65' South and 6126.36' east of
NE Corner of Township 16S-18W SLBM
(¼ Sec. and Sec. No.) (Twp.) (Range) (Meridian)

Bishop Springs Unit Area Millard Utah
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is ____ ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Proposed well will be drilled to about 8000', or 200' into the Pogwip formation. Surface waters will be shut off by a string of 13-3/8" OD surface pipe. Formations showing signs of oil and gas will be cored, drill-stem tested and adequately tested for commercial producing possibilities. An electric log will be run. Subsequent reports, in accordance with the requirements of the Geological Survey, will be made.

(SEE ATTACHED RIDER FOR APPROVAL)

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Gulf Oil Corporation

Address Box 68

Tulsa, Oklahoma

By E. J. [illegible]

Title Superintendent of Operations

U. S. GOVERNMENT PRINTING OFFICE 16—8437-2

RECORD OF SAMPLE DESCRIPTION

GULF 11161 PRINTED IN U.S.A.

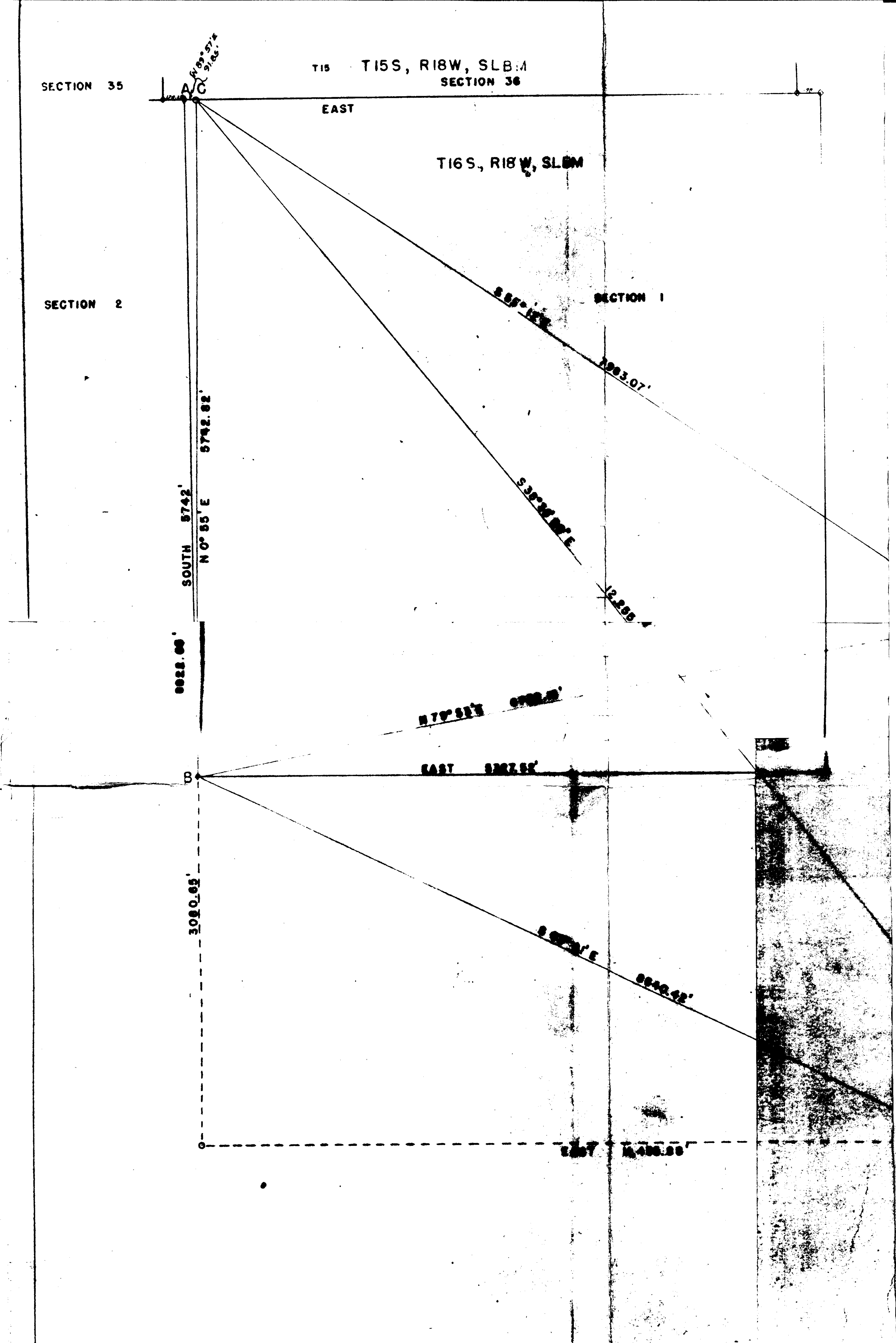
SEC. _____ TWP. _____ RGE. _____ LOCATION _____

FARM _____ NO. _____ ELEVATION _____

OWNER _____ STATE _____ COUNTY _____

SAMPLES FROM 9010 TO 9058 EXAMINED BY _____ DATE _____

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
9010		SCHLUMBERGER ELECTRIC LOG - RUN NO. 3. FINAL RUN.
		LANE WELLS RADIO ACTIVE LOG - RUN NO. 2. FINAL RUN.
9010	9020	DOLOMITE: cream-brown and smokey grey, dense to micro-crystalline, vitreous siliceous.
9020	9040	DOLOMITE: black, medium crystalline, vitreous and QUARTZITE-CHALCEDONY: light brown, very vitreous, transparent to translucent.
9040	9058	QUARTZITE-CHALCEDONY: as above and CHERT: black, pure with some DOLOMITE: cream-brown, micro-crystalline, and black, fine crystalline.
9058		TOTAL DEPTH - PLUGGED AND ABANDONED JUNE 10, 1952.


T15S, R18W, SLBM
SECTION 35
SECTION 36
A
C
EAST
T16S, R18W, SLBM
SECTION 2
SECTION 1
3983.07'
SOUTH 5742'
N 0° 55' E 5742.82'
B
EAST
3080.65'

UNSURV[illegible] E

CERTIFICATE

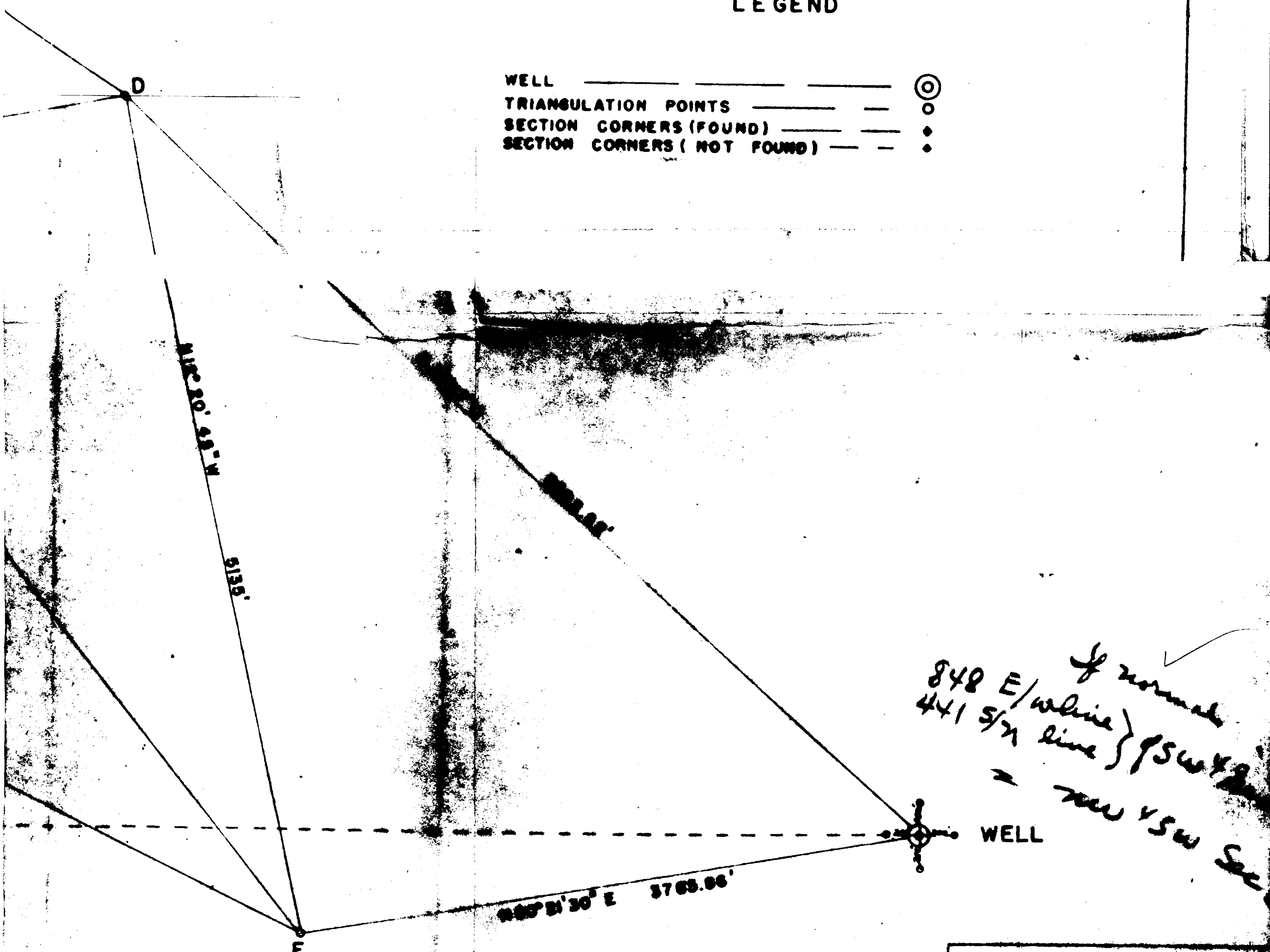
I, ROGER W. SHERIDAN, REGISTERED LAND SURVEYOR, STATE OF UTAH, DO HEREBY CERTIFY THAT I HAVE SURVEYED THIS WELL WHICH IS LOCATED SOUTH 8822.65' & EAST ~~6120.30'~~ 11,455.88 FROM THE NORTH-~~EAST~~ WEST CORNER OF SEC. 1 T16S, R18W, SLBM.

[signature]

[seal] 224

LEGEND

WELL	◎
TRIANGULATION POINTS	o
SECTION CORNERS (FOUND)	◆
SECTION CORNERS (NOT FOUND)	◆



GULF OIL CORP.
MILLARD CO. WILDCAT
SCALE: 1"=660'

Budget Bureau 42-R358.2.
Approval expires 12-31-52.

Form 9-331a
(Feb. 1951)

(SUBMIT IN TRIPLICATE)

Land Office Salt Lake City

Lease No. 069312

Unit Bishop Springs

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ORIGINAL FORWARDED TO CASHIER DEC 21 1951

RECEIVED
DEC 14 1951

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL		~~Drill Stem Test #1~~	X

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

December 10, 19 51

When Surveyed should be C NW¼SW¼ Sec 8 T 16S / 17W

Well No. 1 is located ____ ft. from {N/S} line and ____ ft. from {E/W} line of sec. ____

8822.65' South and 11,455.88' East,

from NW Corner of Sec. 1, 16S, 18W
(¼ Sec. and Sec. No.) (Twp.) (Range) SLBM (Meridian)

Bishop Springs Unit Area Millard Utah
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is ____ ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Confirming Telephone Approval 12/7/51

HOWCO formation tester opened 2 PM on 12-8-51 on 2⅛" EUE tubing using 6¼" wall packer. Packer set at 2335'. Tested 2335-2410' in the Upper Simonson Dolomite. Ran 75' perforated anchor. Tool was open 2½ hours. Received fair blow immediately. Dead in 10 minutes. Swabbed two hours, recovering 7½ bbls. per hour which was gray-green fresh water. Recovered 1075' clear fresh water when string pulled to recover tester. No shows. Hydrostatic pressure 1100 lbs. BHP 600#.

cc: S.G. Sanderson - Tulsa

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Gulf Oil Corporation

Address 333 David Keith Bldg.

P. O. Box 1346

Salt Lake City, Utah

Approved DEC 21 1951

District Engineer

Original Signed By
By E. J. BALTRUSAITIS

Title Area Manager

U. S. GOVERNMENT PRINTING OFFICE 16-2577-4

RECORD OF SAMPLE DESCRIPTION

GULF T 1161 PRINTED IN U.S.A.

SEC. 8 TWP. 16 S RGE. 17 W LOCATION 8322.65' & 11,455.88' E from North-west corner Sec. 1, T16S, R18W

FARM Gulf's Bishop Springs Unit NO. 1 ELEVATION 5768'

OWNER Federal Land STATE Utah COUNTY Millard

SAMPLES FROM 0 TO 865 EXAMINED BY Curtis J. Little DATE Oct. 7, 1951

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
		SPUDDED OCTOBER 7, 1951 IN THE PILOT SHALE (LATE MISSISSIPPIAN - EARLY DEVONIAN) AT A POINT APPROXIMATELY 195 FEET BELOW THE TOP OF THE PILOT SHALE-JOANNA (MADISON) LIMESTONE CONTACT.
0	340	LIMESTONE: cream, buff and gray, calcareous, brittle, moderately hard, abundant secondary calcite, limonite stained, slightly pyritic, interbedded with SHALE: black, fissle, very slightly calcareous, brittle, slightly pyritic, becoming mottled toward bottom.
340	605	SHALE: black, calcareous to non-calcareous, carbonaceous, slickensided, pyritic, brittle, becoming increasingly silty at bottom, moderately hard, heavily fractured, with rare beds of SILTSTONE: red, gray and buff, soft, calcareous, hematite stained. 13 3/8" casing set at 522 feet.
605	625	SILTSTONE: buff and tan, as last above.
625	640	LIMESTONE: dark brownish-gray, fine crystalline, hard, slightly silty to slightly argillaceous, cherty. LOST CIRCULATION at 640 - regained in 1-1/2 hours.
640	670	CHERT: black, gray, brown, pure, secondary.
670	735	LIMESTONE: gray and brown, micro to fine crystalline, silty to argillaceous, occasionally nodular, interbedded with some SHALE: black, carbonaceous, calcareous, slickensided, silty.
735	780	SILTSTONE: buff, very calcareous, soft with rare thin beds of LIMESTONE: brown and gray, very silty, slightly argillaceous, micro-crystalline.
780	840	LIMESTONE: brown, gray and mottled cream-gray, micro-crystalline to dense, very silty, soft, argillaceous.
840	845	LIMESTONE: as last above and SILTSTONE: pink, slightly calcareous, argillaceous with few floating, medium grained sand grains. SLIGHT OIL STAIN.
845	865	CORE NO. 1. Recovery 20 feet. SHALE: gray, dense, very silty, pyritic, very heavily fractured. Fractures filled with white secondary crystalline calcite becoming darker, more dense and brittle toward bottom. No shows of gas or oil.

RECORD OF SAMPLE DESCRIPTION

GULF T-1161 PRINTED IN U.S.A.

SEC. _____ TWP. _____ RGE. _____ LOCATION _____

FARM _____ NO. _____ ELEVATION _____

OWNER _____ STATE _____ COUNTY _____

SAMPLES FROM 865 TO 1226 EXAMINED BY _____ DATE _____

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
865	885	SHALE: as above core.
885	895	LIMESTONE: chocolate brown, fine crystalline, hard, brittle, heavily fractured with very abundant crystalline calcite fillings.
895	900	SILTSTONE: pink, very calcareous with floating SAND: medium grain, well-rounded.
900	905	QUARTZITE: clear to smokey, medium grain, well-rounded to sub-rounded, cemented, in part, with light gray DOLOMITE. LOST CIRCULATION at 905 - regained in 2 hours.
905	940	LIMESTONE: dark gray to brown, micro-crystalline, abundant calcite with occasional thin beds of SILTSTONE: buff, calcareous, hard.
940		TOP GUILMETTE (UPPER DEVONIAN)
940	970	DOLOMITE: brown-gray, coarse crystalline, slightly vitreous, hard, fair porosity, heavily fractured, interbedded with LIMESTONE: black to buff, fine crystalline, slightly silty to shaly.
970	975	QUARTZITE and QUARTZITIC SILTSTONE: pink, slightly dolomitic, very hard.
975	1170	DOLOMITE: brown-gray grading to lighter brown-gray, coarse crystalline, slightly vitreous, brittle, heavily fractured, pyritic. Top characterized by very rare, thin beds of LIMESTONE: gray, dense, silty and SILTSTONE: buff, dolomitic, very fine grain, hard. LOST CIRCULATION at 995 - drilled without returns to 1012 - circulation regained in 26 hours. LOST CIRCULATION at 1110 - regained in 2-3/4 hours.
1170	1210	DOLOMITE: dark brown to black, dense to cryptocrystalline, slightly argillaceous, occasional coatings of black, carbonaceous, slickensided shale.
1210	1226	CORE NO. 2. Recovery 16 feet. DOLOMITE: gray to gray-brown, medium crystalline. Entire core very heavily fractured. Fractures open to partially-filled with calcite. Common slickensided, carbonaceous shale partings dipping 6-8°. Limonite staining in fractures of lower portion of core. A 62° fault of unknown (probably minor) displacement at 1218. No shows of gas or oil.

RECORD OF SAMPLE DESCRIPTION

GULF T 1161 PRINTED IN U.S.A.

SEC. TWP. RGE. LOCATION

FARM NO. ELEVATION

OWNER STATE COUNTY

SAMPLES FROM 1226 TO 1961 EXAMINED BY DATE

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
1226	1240	DOLOMITE: as above interbedded with DOLOMITIC LIMESTONE: light brown, very dense, pyritic and black, carbonaceous shale partings.
1240	1280	DOLOMITE: gray and brown, coarse crystalline, slightly vitreous, slightly argillaceous, hard to brittle with occasional thin beds of DOLOMITE: tan, fine sucrose, slightly silty.
1280	1400	LIMESTONE: interbedded dark brown, black and dark gray, dense, silty, becoming slightly lighter and micro-crystalline toward bottom. Heavily fractured. Fractures filled with white secondary crystalline calcite. Scattered slickensides throughout.
1400	1430	DOLOMITE: dark gray, coarse crystalline, slightly vitreous, hard, becoming lighter in color toward bottom.
1430	1615	LIMESTONE: thinly bedded varicolored, lithographic, micro and medium crystalline, silty to sandy. Rare thin beds of DOLOMITE: gray, fine crystalline, hard, slightly silty and black, shiny, carbonaceous, calcareous, slickensided shale partings. Fractured as above.
1615	1650	DOLOMITE: dark gray, micro-crystalline, slightly sucrose, hard, slightly silty.
1650	1730	LIMESTONE: brown and gray, fine crystalline, silty, argillaceous, mottled, frosty, pyritic, slightly dolomitic, occasionally slickensided.
1730	1885	SHALE: gray, silty, calcareous to limey, pyritic, slickensided with rare thin beds of DOLOMITE: gray-brown, coarse crystalline.
1885	1954	SHALE: black, dense, carbonaceous, pyritic, abundant slickensides, dolomitic, becoming silty at bottom.
1954	1961	CORE NO. 3. Recovery 7 feet. SANDY SHALE: dark brownish-black, very dense, very hard, slightly dolomitic, very pyritic, with medium-coarse grained sand. Entire core very heavily fractured. Common partially calcite-filled fractures and vugs. Abundant black, shiny, soft, carbonaceous, slickensided shale partings and stylolites. No shows of gas or oil.

SEC. TWP. RGE. LOCATION

FARM NO. ELEVATION

OWNER STATE COUNTY

SAMPLES FROM 1961 TO 2229 EXAMINED BY DATE

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
1961	1970	CORE NO. 4. Recovery 9 feet. 5 feet - SHALE: dark grey, dense, very hard, slightly vitreous, dolomitic, with abundant unoriented, calcite-filled fractures from veinlets to ½" diameter. Abundant black, carbonaceous, shaly material on surfaces of stylolites. 4 feet - SHALE: dark dirty grey, very fine grained, silty, hard, pyritic, dolomitic, becoming increasingly silty toward bottom. Good dip checks of 20°. No shows of gas or oil.
1970	1990	SHALE: as above core.
1990	2010	LIMESTONE: cream-brown and grey-brown, dense, argillaceous, slightly silty, interbedded with SHALE: dark grey, sandy to silty, dolomitic, hard, slickensided, fractured. REVERSE FAULT ZONE CENTERING AT APPROXIMATELY 2000 FEET. THROW - 1385 FEET. DRILLING PILOT SHALE (UPPER DEVONIAN)
2010	2065	SHALE: dark grey, dense, very calcareous, silty, carbonaceous, pyritic, slickensided.
2065	2179	LIMESTONE: grey-brown, mottled in part, sucrose, micro-crystalline, silty, argillaceous, pyritic, abundant slickensides, calcite-filled fractures. LOST SOME DRILLING MUD TO FORMATION AT 2120, 2148 and 2170.
2179	2229	CORE NO. 5. Recovery 50 feet. 41 feet - LIMESTONE: dark grey-brown, micro to fine crystalline, very silty, carbonaceous, hard. Rare to abundant unoriented, partially-open to calcite-filled fractures. Abundant soft, black, shiny, carbonaceous, slickensides and stylolites. Evidence of horizontal and vertical minor movements in alignment of fractures. Core increasingly fractured and vuggy from 2207 to 2211. Fractures rare from 2211 to 2229. 9 feet - SHALY LIMESTONE: dark brownish-grey, dense, hard, very argillaceous, slightly silty, increasingly pyritic. Bedding plane dips in core were as follows: 2180 - 18°; 2184 - 14°; 2187 - 10°; 2213 - 8-9°; 2215 - 8-10°. No shows of gas or oil.

RECORD OF SAMPLE DESCRIPTION

GULF T 1161 PRINTED IN U.S.A.

SEC ... TWP. ... RGE. ... LOCATION ...

FARM ... NO. ... ELEVATION ...

OWNER ... STATE ... COUNTY ...

SAMPLES FROM 2229 TO 2410 EXAMINED BY ... DATE ...

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
2229	2235	CHALY LIMESTONE and LIMESTONE: as in above core.
2235	2300	QUARTZITE: white to smokey gray, dense, very slightly dolomitic grading to SHALE: gray, very siliceous, very hard, carbonaceous.
2300		SECOND TOP OF GUNTERITE (UPPER DEVONIAN)
2300	2310	DOLOMITE: dark gray-brown, fine to medium crystalline, hard, slightly vitreous.
2310	2320	SHALE: dark gray, sandy, very calcareous.
2320	2340	DOLOMITE: as last above.
2340	2344	LIMESTONE: dark gray-brown, silty to sandy, grading to chocolate brown, lithographic.
2344	2365	CORE No. 6. Recovery 21 feet.
		10 feet - LIMESTONE: gray-brown, micro-crystalline, sucrose, very silty, pyritic, becoming increasingly dense, slightly silty toward bottom. Abundant black, soft, carbonaceous, slickensided shale partings.
		3 feet - LIMESTONE: chocolate brown, lithographic, brittle. Rare to common calcite-filled vugs.
		8 feet - DOLOMITE: dark brownish-gray, medium crystalline, hard, vitreous. Abundant calcite-filled to partially-filled vugs. Entire core very heavily fractured. Fractures are unoriented, ranging from microscopic veinlets to 1" diameter and calcite-filled to partially-filled. Slight sour gas odor on fresh break. Very slight fluorescence in fractures.
		At 2362: Porosity 7.9% - Permeability zero.
		At 2364: Porosity 10.1% - Permeability zero.
2365	2390	DOLOMITE: gray-brown becoming lighter, medium crystalline, hard, tight.
2390	2402	DOLOMITE: cream grading to dark gray, micro to fine sucrose, hard, pyritic, frosty.
2402	2410	CORE NO. 7. Recovery 8 feet.
		DOLOMITE: dark gray, micro-crystalline, very hard, tight, slightly pyritic. Entire core very heavily fractured and common vugs are partially-filled with calcite.
		At 2405: Porosity 7.1% - Permeability zero.
		At 2407: Porosity 6.3% - Permeability zero.
		At 2409: Porosity 5.9% - Permeability zero.

SEC TWP. RG LOCATION

FARM NO. ELEVATION

OWNER STATE COUNTY

SAMPLES FROM 2410 TO 2665 EXAMINED BY DATE

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
2335	2410	DRILL STEM FORMATION TEST NO. 1.
		Halliburton Oil Well Cementing Co. formation tester opened at 2 P.M. on December 8, 1951. 8½" wall packer run on 2½" NUE tubing. Packer set at 2335. Tested interval 2335 to 2410 in the lower fault plate of the upper Guilmette Formation. Ran 75 feet perforated anchor. Tool open 2½ hours. Received fair blow immediately. Dead in 10 minutes. Swabbed 2 hours recovering 7½ barrels of fluid per hour of gray-green fresh water. When tubing pulled to recover tester, 1075 feet of clear, fresh water was recovered. No shows. Hydrostatic pressure 1100 psi. Bottom Hole Pressure - 600 psi.
		Chlorides were as follows:
		Bishop Springs fresh water: 5.4 grains per gallon.
		Drilling fluid: 5.8 grains per gallon.
		Swabbed formation water: 8.7 grains per gallon on each of the three samples analyzed.
2410	2445	DOLOMITE: black, brown and gray, fine to medium crystalline, frosty, saccrose.
2445	2495	LIMESTONE: chocolate brown and cream, micro-saccrose, frosty, silty, becoming darker, siltier and possibly brecciated toward bottom.
2495	2525	DOLOMITE: dark gray, medium to coarse crystalline, vitreous, pyritic, streaks of black, carbonaceous shale partings.
2525	2625	LIMESTONE and DOLOMITIC LIMESTONE: dark brown and dark brown-gray, lithographic to micro-crystalline, brittle, silty, vitreous, carbonaceous, slickensided, occasionally interbedded with
		LIMESTONE: cream, soft, saccrose and
		DOLOMITE: brown and gray, fine to medium crystalline.
2625	2665	DOLOMITE: chocolate brown, medium crystalline, saccrose, porcelaneous, slightly nodular becoming darker, fine crystalline, vitreous, tight toward bottom with rare beds of
		LIMESTONE: grayish-brown, dense to micro-crystalline, saccrose, frosty.

RECORD OF SAMPLE DESCRIPTION

GULF T 1161 PRINTED IN U.S.A.

SEC. TWP. RGE. LOCATION

FARM NO. ELEVATION

OWNER STATE COUNTY

SAMPLES FROM 2665 TO 3380 EXAMINED BY DATE

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
2665	2730	DOLOMITIC LIMESTONE: dirty brown, micro-crystalline, sucrose and dark brown, silty interbedded with DOLOMITE: brown, medium crystalline and grey, fine crystalline, slightly sucrose.
2730	2755	DOLOMITE: light brown, coarse crystalline becoming dark grey, fine crystalline, sucrose.
2755	2910	LIMESTONE: light cream-brown, dense to micro-crystalline, sucrose, dolomitic, with rare beds of DOLOMITE: brown, fine to medium crystalline.
2910	2975	LIMESTONE: brown and grey, dense to fine crystalline, vitreous, pyritic, sucrose, dolomitic, traces of oolitic, some interbedding with DOLOMITE: brown to dark grey, medium crystalline, pyritic.
2975	3050	LIMESTONE: dirty brown-grey, micro to medium crystalline, sucrose, dolomitic, mottled, soft, with carbonaceous slickensides.
3050	3070	DOLOMITIC LIMESTONE: dark grey-brown, fine crystalline, hard.
3070	3170	LIMESTONE: interbedded cream, grey and brown, micro-crystalline, mottled, vitreous, pyritic, sucrose, dolomitic, becoming darker toward bottom.
3170	3200	DOLOMITE: dark grey, fine crystalline grading to grey, medium crystalline, pyritic, grading to grey-brown, dense, pyritic, slightly vitreous.
3200	3230	LIMESTONE: dark brown, lithographic, frosty, slickensided, dolomitic, grading to DOLOMITIC LIMESTONE: dark grey-brown, micro-crystalline.
3230	3245	SHALE: dirty grey, dense, silty, very calcareous, hard, brittle.
3245	3300	LIMESTONE: brown, micro-crystalline, brittle, vitreous, sucrose, slickensided, very heavily fractured with rare thin beds of shale as above.
3300	3315	SHALE: dirty grey, dense, carbonaceous, very calcareous, hard.
3315	3330	LIMESTONE: grey-green, hard, dense, silty to argillaceous.
3330	3380	LIMESTONE: dark and light brown, lithographic, heavily fractured, ? Brecciated ?, very brittle grading to DOLOMITIC LIMESTONE: grey-green, dense, silty and LIMESTONE: brown, medium crystalline, heavily fractured.

RECORD OF SAMPLE DESCRIPTION

GULF T-1161 PRINTED IN U.S.A.

SEC. TWP. RGE. LOCATION

FARM NO. ELEVATION

OWNER STATE COUNTY

SAMPLES FROM 3380 TO 3675 EXAMINED BY DATE

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
3380	3391	DOLOMITE: gray, dense to micro-crystalline and SANDSTONE: gray, very fine to fine grain, unsorted, very calcareous.
3391	3413	CORE NO. 8. Recovery 22 feet. 4 feet - SHALE: gray, dense, silty, very calcareous. Slippage plane with dip of 30°. Possible bedding plane. 3 feet - LIMESTONE: gray to gray-brown, dense, slightly silty with veins of QUARTZITIC SANDSTONE: fine to coarse grain, unsorted and SANDSTONE: clear quartz grains as above with limestone cement. Slippage plane dipping 30°. Possible bedding plane. 6 feet - LIMESTONE: gray to gray-brown, dense, slightly silty. Slippage plane dipping 30°. Possible bedding plane. 4 feet - LIMESTONE: dark brown to gray-brown, micro to fine crystalline, vitreous. Fault - dip 30°. 5 feet - LIMESTONE: dark and light gray, dense to micro-crystalline, increasingly vitreous to bottom, slightly dolomitic. Three faults dipping 65°, 50° and 55° with minor drag folds. Entire core is shot-through with unoriented calcite-filled fractures varying from tiny veinlets to ¼" diameter and unoriented carbonaceous, shaly slickensides. No shows of gas or oil.
3413	3640	LIMESTONE: brown and gray, lithographic to micro-crystalline, sucrose, vitreous, pyritic, silty, becoming increasingly shaly and more heavily fractured toward bottom.
3640	3650	LIMESTONE: blackish-green, dense, argillaceous.
3650	3660	LIMESTONE: dirty green-brown, micro-crystalline, oolitic, mottled.
3660	3675	LIMESTONE: very complex breccia or re-worked limestone as above, very heavily fractured.
		REVERSE FAULT AT APPROXIMATELY 3675. THROW - 1660 FEET. DRILLING UPPER CHESTER.

RECORD OF SAMPLE DESCRIPTION

GULF T-1161 PRINTED IN U.S.A.

SEC. TWP. RGE. LOCATION

FARM NO. ELEVATION

OWNER STATE COUNTY

SAMPLES FROM 3675 TO 3945 EXAMINED BY DATE

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
3675	3733	DOLOMITE: brown and gray, medium crystalline, vitreous, argillaceous grading to fine crystalline toward bottom, occasionally interbedded with DOLOMITIC LIMESTONE: dark brown to gray, dense to micro-crystalline, very shaly and silty.
3733	3753	CORE NO. 9. Recovery 20 feet. DOLOMITIC LIMESTONE: dark brown to dark gray-brown, fine crystalline, slightly shaly, hard and DOLOMITE: brown to brown-gray, medium crystalline with intra-granular calcite crystals. Entire core is very heavily fractured. Fractures are unoriented and calcite-filled to partially-filled with drilling mud contamination throughout. Estimated 30% of core by volume is secondary calcite. Due to the complete shot-through nature of the fractures, the core is very crumbly and shattered. Although no accurate bedding dips were obtained, stylolites and questionable bedding partings suggest dips of less than 20°. Throughout core are unoriented black, shiny, carbonaceous shale partings that are highly slickensided. Thin breccia zone at bottom of core composed of dolomitic limestone and dolomite cemented with calcite.
3753	3820	DOLOMITE: brown and gray, medium crystalline, vitreous, argillaceous grading to fine crystalline toward bottom, occasionally interbedded with DOLOMITIC LIMESTONE: dark brown to gray, dense to micro-crystalline, very shaly and silty.
3820	3920	LIMESTONE: dark brown and gray, lithographic to micro-crystalline, slightly dolomitic, mottled, sucrosa, vitreous, slightly shaly.
3920	3945	LIMESTONE: brown to dark brown, micro-crystalline, vitreous.
3945	3959	CORE NO. 10. Recovery 14 feet. 8 feet - LIMESTONE: dark brown to brown-gray, micro-crystalline, slightly pyritic, embedded, tiny, calcite crystals, unoriented, microscopic to tiny, calcite-filled vuggets, contorted stylolites up to 1/8" diameter filled with black, calcareous, carbonaceous shale, moderately to heavily fractured, many of the fractures are leaning, secondary fractures are common, fractures are filled to partially-filled with calcite and many are contaminated with drilling fluid, vugs are common and many are

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SAMPLES FROM 3945 TO 4176 EXAMINED BY DATE

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
		Core No. 10 - cont'd.
		contaminated with drilling fluid, vugs are common and many are contorted and filled with calcite or a black, carbonaceous material. Bottom foot has fault with dip of 60°. Very heavily fractured.
		3 feet - BRECCIA: limestone as above and
		LIMESTONE: cream-brown to buff, micro-crystalline, re-worked.
		Breccia cemented with calcite. Fault through breccia with dip of 60°.
		3 feet - LIMESTONE: dark brown to brown-gray, micro-crystalline, slightly dolomitic. Fault, possibly along bedding plane, with dip of 35°. Some fractures filled with black, calcareous, carbonaceous shale. Some limey dolomite appearing in veins and blotches. No shows of gas or oil.
3959	4050	LIMESTONE: cream to buff, dense, slightly mottled and dark brown, micro-crystalline, vitreous.
4050	4075	LIMESTONE: as above, slightly lighter in color and dolomitic.
4075	4105	DOLOMITE: brown-gray, fine crystalline grading to medium crystalline, vitreous.
4105	4114	LIMESTONE: dark gray, dense, shaly, carbonaceous, abundant slickensides, very heavily fractured.
4114	4149	CORE NO. 11. Recovery 35 feet.
		BRECCIA: composed of limestones and dolomites - predominantly limestones. Great variation of colors, crystallinities, accessory minerals and textures. Breccia fragments angular to sub-angular - no alignment - all sizes - cemented with calcite. Abundant open to partially-filled to calcite-filled fractures and veinlets which are within and through breccia fragments. Black, carbonaceous, slickensided planes are common within and between breccia. Very faint and spotty odor of sour sulphur gas throughout core. No fluorescence, no stain.
4149	4176	CORE NO. 12. Recovery 25 feet.
		BRECCIA: as above Core. Breccia fragments angular, predominantly less than 3" diameter, mm shot-through with calcite-filled veinlets and fractures. Lower 13 feet badly shattered and crumbled. Scattered, unoriented black, carbonaceous, calcareous, slickensided shale partings throughout. Very faint, very spotty odor of sour sulphur gas. No fluorescence, no stain.

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SAMPLES FROM 4176 TO 4365 EXAMINED BY DATE

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
4176	4200	BRECCIA: as above cores.
4200	4250	LIMESTONE: brown-gray, lithographic to micro-crystalline, brittle, shaly, pyritic, sucrose.
4250	4270	SHALE: black, dense, platy, dolomitic and minor amounts of LIMESTONE: gray-green, dense, shaly.
4270	4330	LIMESTONE: light and dark gray-brown, lithographic to micro-crystalline, sucrose, pyritic, with minor amounts of LIMESTONE: cream, powdery, soft, dense.
4330	4365	SHALE: black, very dense, dolomitic, pyritic, slickensided, slightly siliceous becoming increasingly fissile toward bottom, interbedded with LIMESTONE: dark brown-gray, lithographic to micro-crystalline, pyritic, very shaly, mottled, grading to LIMESTONE: cream, dense, shaly, brittle, very heavily fractured, abundant secondary calcite.
522	4365	SCHLUMBERGER ELECTRIC LOG - RUN NO. 1.
4365	4330	CORE NO. 13. Recovery 15 feet. 1 foot - LIMESTONE: gray-green, lithographic to micro-crystalline, brittle, pyritic, heavily fractured. 1 foot - SHALY LIMESTONE: dark gray, dense, pyritic, platy, moderately fractured, poor dip checks: 15-20°. 1 foot - LIMESTONE: light gray, micro-crystalline, vitreous, pyritic, pure, moderately fractured. Fault dipping 45°. Change in lithology to: 2 feet - LIMESTONE: cream-brown, medium crystalline, slightly dolomitic, pyritic, grading to light gray to gray, micro-crystalline, vitreous, pyritic, grading to gray-brown, lithographic, platy, shaly, pyritic with thin shale partings. Dip checks of 8-10°. 2 feet - LIMESTONE: light gray, micro-crystalline, pyritic, siliceous, becoming increasingly vuggy and grading to SANDSTONE: light smoky gray, fine grain, cemented with lime, slightly quartzitic, pyritic. 1 foot - LIGHT SHALE: gray, dense, siliceous, pyritic.

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SAMPLES FROM 4365 TO 4775 EXAMINED BY DATE

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
		Core No. 13 - cont'd.
		2 feet - SHALE: gray, dense, pyritic, slightly dolomitic, slightly fissile, moderately fractured. Dip 8-10°.
		1 foot - SHALE: black, very dense, splintery, fissile, carbonaceous, pyritic. Bedding plane dips: 20°. Possible minor faults dipping 7° and 45°.
		2 feet - LIMESTONE: light gray becoming dark gray, lithographic, brittle, vitreous, flaky, pyritic, moderately to heavily fractured, thin-bedded, occasional stylolites and slickensides coated with carbonaceous shale.
		2 feet - SHALE: dark gray-brown, frosty, hard, calcareous, pyritic, abundant stylolites, moderately fractured. Dips: 10°. Slight spotty odor of sour gas. No shows of oil.
4330	4390	LIMESTONE: dark gray-brown, micro-crystalline, mottled, slightly sucrose.
4390	4505	LIMESTONE: light bluish-gray, micro-crystalline, porcelaneous, shaly.
4505	4610	LIMESTONE: black grading to gray and gray-brown, micro-crystalline, silty, shaly, pyritic, slightly carbonaceous with rare thin beds of SHALE: black, dense, carbonaceous, calcareous.
4610	4635	LIMESTONE: brown and gray, lithographic, brittle, hard.
4635	4645	CORE NO. 14. Recovery 10 feet.
		LIMESTONE: dark gray, dense, shaly, very carbonaceous, grading quickly to LIMESTONE: brown-gray, micro-crystalline to dense, vitreous, slightly porcelaneous, pyritic, slightly shaly, carbonaceous. Core completely shot-through with secondary crystalline calcite-filled fractures. Some evidence of brecciation. Abundant slickensides. Bottom foot has drag folds and a slickensided fault dipping 35°.
		Faint spotty odor of sour gas. No shows of oil.
4645	4690	LIMESTONE: gray to gray-brown, micro-crystalline, pyritic, vitreous.
4690	4740	LIMESTONE: dark gray-brown, lithographic, pyritic, slightly carbonaceous, grading at bottom to
		LIMESTONE: black, carbonaceous, splintery, shaly.
4740	4775	LIMESTONE: brown, micro-crystalline, vitreous, porcelaneous, sucrose, frosty, abundant calcite.

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SAMPLES FROM 4775 TO 5400 EXAMINED BY _____ DATE _____

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
4775	4785	LIMESTONE: as above, abundant calcite. Trace buff, sandy, calcitic SILTSTONE.
4785	4790	LOST CIRCULATION – NO RETURNS – CEMENTED THREE TIMES. Required 3-1/2 days.
4790	4340	LIMESTONE: gray and brown, micro-crystalline, massive, frosty interbedded rarely with beds of DOLOMITE: dark gray, fine crystalline, vitreous.
4340	4970	LIMESTONE: cream-brown and brown, micro-crystalline, vitreous, slightly porcelaneous, slightly dolomitic, rare shaly zones toward bottom.
4970	4987	LIMESTONE: dark gray, micro-crystalline, vitreous and light gray, fine crystalline, dolomitic.
4987	5000	CORE NO. 15. Recovery 13 feet. LIMESTONE: gray-brown and cream-gray-brown, micro-crystalline, vitreous, porcelaneous, brittle, flaky. Universally fractured. Brecciated in part. Suggestive dips of 15°. No shows of gas or oil.
5000	5200	LIMESTONE: cream-brown, smoky gray and brown, micro-crystalline, pure, massive, vitreous, porcelaneous, becoming slightly carbonaceous and shaly at bottom.
5200	5260	DOLOMITIC LIMESTONE: gray grading to cream-brown, micro-crystalline, very dolomitic, vitreous, porcelaneous.
5260	5268	LIMESTONE and DOLOMITIC LIMESTONE: very thin-bedded, or zone of unconformity, sandy in part.
5268		TOP SIMPSON DOLOMITE.
5268	5380	DOLOMITE: dark brown to light brown to dark grayish-brown to black, micro to fine crystalline, vitreous, porcelaneous, carbonaceous to slightly argillaceous.
5380	5395	DOLOMITE: dark gray-brown, medium crystalline, slightly carbonaceous to shaly. LOST SOME DRILLING MUD from 5390 to 5400.
5395	5415	LIMESTONE: dark grayish-brown, micro-crystalline, pyritic, slightly silty.
5415	5450	DOLOMITE: brownish-gray, medium crystalline, vitreous, carbonaceous, slightly shaly.

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SAMPLES FROM 5450 TO 6000 EXAMINED BY DATE

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
5450	5541	DOLOMITE: dark gray, micro to fine crystalline, vitreous, porcelaneous with rare thin beds
		DOLOMITE: light brown, medium crystalline, vitreous and
		LIMESTONE: light cream-brown, lithographic.
5541		SCHLUMBERGER ELECTRIC LOG - RUN NO. 2.
		SCHLUMBERGER DIP METER - RUN NO. 1.
		LANE WELLS RADIO ACTIVE LOG - RUN NO. 1.
5541	5550	CORE NO. 16. Recovery 9 feet.
		DOLOMITE: cream-brown grading to gray-brown, micro to fine crystalline, porcelaneous, hard, vitreous. Abundant fractures coated with a film of calcite. Dips - 10°. Porosity - 4.3%; permeability zero. Slight spotty odor of sour gas. No show of oil.
5550	5560	DOLOMITE: as above core.
5560	5570	DOLOMITIC LIMESTONE and LIMESTONE: gray, micro-crystalline, sucrose, argillaceous.
5570	5610	DOLOMITE: dark grayish-brown grading to light chocolate brown, medium crystalline, vitreous, sucrose.
5610	5630	DOLOMITE: light chocolate brown to smoky gray, micro to fine crystalline, vitreous, hard.
5630	5660	DOLOMITE: gray-brown, fine to medium crystalline, vitreous, porcelaneous.
5660	5690	DOLOMITE: light smoky gray, micro to fine crystalline, slightly vitreous.
5690	5700	DOLOMITE: grayish-brown, medium to coarse crystalline, vitreous, porcelaneous.
5700	5760	DOLOMITE: brown and cream-brown, micro to fine crystalline, vitreous, porcelaneous, slightly sucrose.
5760	5820	DOLOMITE: gray to cream, coarse crystalline, vitreous, porcelaneous.
5820	5835	DOLOMITE: bluish-smoky gray, micro-crystalline, vitreous, porcelaneous.
5835	5865	DOLOMITE: cream, coarse crystalline, porcelaneous, hard.
5865	6000	DOLOMITE: cream-brown, very coarse crystalline, vitreous, porcelaneous, with rare thin beds of
		DOLOMITE: micro-crystalline, very porcelaneous.

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SAMPLES FROM 6000 TO 6525 EXAMINED BY _____ DATE _____

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
6000		TOP SEVY DOLOMITE.
6000	6010	DOLOMITE: cream-brown, lithographic to micro-crystalline, vitreous, porcelaneous, interbedded with
		SANDSTONE: smokey grey, medium grain, generally well-rounded, dolomitic.
6010	6025	DOLOMITE: gray and cream-brown, lithographic, vitreous, porcelaneous.
6025	6030	QUARTZITE: colorless, medium grain, completely silicified.
6030	6050	DOLOMITE: cream and brown, medium to coarse crystalline, hard, interbedded with minor beds of
		DOLOMITE: light brown, micro-crystalline, porcelaneous.
6050	6090	DOLOMITE: brown, lithographic to micro-crystalline, porcelaneous, interbedded with
		SANDSTONE and QUARTZITE: smokey grey, coarse grain, well-rounded and minor thin beds of
		LIMESTONE: brown-grey, micro-crystalline, vitreous, dolomitic.
6090	6290	DOLOMITE: light cream-brown and occasional smokey grey, lithographic to micro-crystalline, vitreous, very porcelaneous, slightly massive with occasional black, carbonaceous, slickensided shale parting.
		LOST SOME DRILLING MUD at 6200.
6290	6395	DOLOMITE: smokey grey, greyish-brown and cream-brown, micro-crystalline, porcelaneous, vitreous, rarely pyritic, massive.
6395	6525	DOLOMITE: brown and cream-brown, micro to fine crystalline, porcelaneous, vitreous, massive, fractured, becoming darker at bottom.
6525	6535	CORE NO. 17. Recovery 10 feet.
		1 1/2 feet - DOLOMITE: smokey grey, micro-crystalline, porcelaneous, slightly vitreous, hard. Breccia of tiny angular to sub-angular, unoriented fragments cemented with white granular secondary calcite. Core completely shattered. Probably fault gouge. Abundant high angle fractures coated with calcite. Abundant contorted, very soft, carbonaceous shale veinlets. Rare unfilled, contorted vuglets.
		1 1/2 feet - DOLOMITE: dark grey, fine crystalline, vitreous, slightly shaly. Brecciated as above.

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SAMPLES FROM 6525 TO 7020 EXAMINED BY DATE

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
		Core No. 17 - cont'd.
		7 feet - DOLOMITE: light smoky grey-brown, fine crystalline, vitreous, very porcelaneous, brittle, rare finely disseminated pyrite, grading to DOLOMITE: light cream-brown, micro-crystalline, porcelaneous. Moderately fractured. Occasional contorted micro-vuglets filled with calcite. Abundant slickensided surfaces.
		Fair dip checks of 10-12° in shale partings. No shows of gas or oil.
6595	6590	DOLOMITE: cream-grey, medium to fine crystalline, porcelaneous, sucrose.
6590	6655	DOLOMITE: cream, cream-brown and light smoky grey, micro-crystalline, porcelaneous, vitreous, rarely slightly pyritic, with occasional calcareous zones.
6655	6680	DOLOMITE: interbedded dirty grey, brown-grey and cream-brown, medium crystalline, slightly vitreous, hard.
6680	6770	DOLOMITE: cream and light smoky grey, micro to fine crystalline, vitreous, very porcelaneous with rare thin beds of
		DOLOMITE: cream, lithographic, very porcelaneous becoming dark grey, fine crystalline, vitreous at bottom.
6770		TOP LAKETOWN DOLOMITE.
6770	6865	DOLOMITE: cream grading to dark grey, coarse crystalline, mottled, slightly vitreous, becoming sucrose and pyritic at bottom.
6865	6895	CHERT: dark grey to black, pure, interbedded with
		DOLOMITE: dark grey, brown and cream, micro to fine crystalline, porcelaneous, vitreous.
6895	6925	DOLOMITE: cream and cream-brown, fine crystalline, porcelaneous, sucrose.
6925	7008	DOLOMITE: cream, medium crystalline, light, hard, porcelaneous, becoming cherty and siliceous at 6945.
7008	7018	CORE NO. 18. Recovery 2 feet.
		DOLOMITE: greenish-smoky grey, coarse crystalline, hard, heavily fractured. Fractures usually filled with crystalline calcite, occasionally with nodular silky chert and rarely with clear quartzite. No shows of gas or oil.
7018	7020	DOLOMITE: cream, coarse crystalline, cherty, becoming dark grey, fine crystalline, cherty and siliceous at bottom.

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SAMPLES FROM 7050 TO 7505 EXAMINED BY _____ DATE _____

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
7050	7060	DOLOMITE: dirty brown, fine crystalline, mottled, massive.
7060	7130	DOLOMITE: cream, medium to coarse crystalline, very porcellaneous, tight, vitreous.
7130	7220	DOLOMITE: light chocolate brown grading to light smoky gray, fine crystalline, massive, vitreous, porcellaneous, becoming slightly cherty at bottom.
7220	7300	DOLOMITE: cream, medium crystalline, very porcellaneous, grading to DOLOMITE: dark gray, medium crystalline, vitreous, mottled, rarely interbedded with DOLOMITE: gray, micro -crystalline.
7300	7320	DOLOMITE: dark gray to dark brown-gray, medium crystalline, vitreous, mottled, cherty, slightly siliceous.
7320	7345	DOLOMITE: cream and dark gray, micro to fine crystalline, cherty with abundant secondary calcite. LOST SOME DRILLING MUD SLOWLY at 7330.
7345	7375	DOLOMITE: cream-brown, micro to medium crystalline, massive, sandy, abundant calcite.
7375	7385	CORE NO. 19. Recovery 4 feet. DOLOMITE: light smoky gray and light cream-brown, medium to coarse crystalline, very porcellaneous, slightly vitreous. Very heavily fractured and shattered. Fractures generally open with some coatings of calcite. Abundant vuglets, partially filled with calcite. No shows of gas or oil.
7385	7440	DOLOMITE: light smoky gray and cream, medium crystalline, very porcellaneous, increase in calcite.
7440		REVERSE FAULT at 7440. THROW = 2110 FEET. DRILLING UPPER SECTION.
7440	7505	PROBABLY BRECCIA OF: LIMESTONE: dirty, earthy gray and black, micro-crystalline, very shaly, carbonaceous, very abundant siltstone and DOLOMITE: dark gray, fine crystalline, very vitreous.

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SAMPLES FROM 7505 TO 7595 EXAMINED BY DATE

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
7505	7570	LIMESTONE: dirty, earthy gray to dark gray, carbonaceous, very shaly, slightly vitreous, very abundant slickensides, becoming brittle and massive at bottom.
7570	7580	DOLOMITE: earthy gray, fine crystalline, massive, shaly, pyritic, with zones of "sugar-like" limestone. Good porosity.
7580	7595	CORE NO. 2. Recovery 15 feet.
		2 feet - DOLOMITE: dark gray, fine crystalline, massive, pyritic, slightly shaly, occasional thin soft, black, carbonaceous, shale partings which are slickensided. Very poor dip checks of 10°. Rare tiny, vertical, calcite-filled fractures. Porosity - 4.8 to 5.2%; permeability zero. Spotty odor of sour gas throughout core.
		6 feet - DOLOMITE: as above, becoming shaly. Rare partially calcite-filled vugs up to 1/2" diameter at bottom. Poor dip checks of 15°.
		4 feet - DOLOMITE: dark brownish-gray, fine to medium crystalline, shaly, abundant microscopic vuglets. Porosity - 4.9%; permeability zero. Moderately fractured.
		Extremely vuggy at bottom, with vugs up to 1 1/2" diameter. Porosity - 20% estimated; permeability fair.
		3 feet - DOLOMITE: dark brownish-gray, medium to coarse crystalline, pure, slightly vitreous, heavily fractured. Occasional vugs as above. Porosity - 3%; permeability - 1.2 millidarcys.
7555	7595	DRILL STEM FORMATION TEST NO. 2.
		Ran Halliburton Oil Well Cementing Co. formation tester on April 15, 1952 to test interval 7555 to 7595. Tool open 32 minutes - shut-in 15 minutes. Strong blow for 5 minutes - faint blow for 10 minutes - very faint blow through remainder of test. Mud fluid rise above packer: 380 feet. Recovered 360 feet drilling mud slightly cut with fresh water.
		Initial hydrostatic pressure: 3625 psi.
		Initial flow pressure: zero.
		Final flow pressure: zero.
		Final hydrostatic pressure: 3606 psi.
		Shut-in pressure: 288 psi.

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SAMPLES FROM 7995 TO 8140 EXAMINED BY ____ DATE ____

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
		Drill Stem Formation Test No. 2 – cont'd.
		WEIGHT / Ph / CHLORIDES
		Drilling Mud: 9 lbs/gallon / 9 / 100 parts/million
		DST Fluid
		Sample No. 1: 8.7 / 9 / Less than 100
		Sample No. 2: 8.8 / 9 / Less than 100
		Sample No. 3: 8.6 / 8.5 / Less than 100
		Sample No. 4: 8.9 / 8.5 / Less than 100
7995	7610	DOLOMITE: dark brownish-gray, fine crystalline, vitreous, sucrose.
7610	7620	DOLOMITE: light smokey gray, medium crystalline, vitreous, porcelaneous, tight.
7620	7780	DOLOMITE: chocolate brown and light to dark smokey gray, micro-crystalline, vitreous, sucrose with rare beds of DOLOMITE: lithographic, fine and medium crystalline.
7780	7800	DOLOMITE: cream-brown, medium crystalline, mottled, vitreous, slightly porcelaneous.
7800	7875	DOLOMITE: cream-brown grading to dark gray and gray-brown, micro to fine crystalline, vitreous, porcelaneous.
7875	7920	DOLOMITE: light and dark brown, medium crystalline (traces of micro-crystalline), vitreous, slightly mottled.
7920	7930	DOLOMITE: bluish smokey gray, fine crystalline, vitreous, trashy.
7930	7940	DOLOMITE: dirty brown, coarse crystalline, slightly vitreous.
7940	7970	DOLOMITE: smokey gray, micro-crystalline to dense, porcelaneous.
7970	8080	DOLOMITE: cream-brown, medium crystalline, vitreous, slightly sucrose, slightly porcelaneous. LOST SOME DRILLING MUD SLOWLY at 8092.
8080	8110	DOLOMITE: thin bedded grays, micro to fine crystalline, porcelaneous.
8110		SHOWED TOP SEVY DOLOMITE.
8110	8125	SANDY DOLOMITE: cream-brown and smokey gray, fine crystalline with coarse grained, floating sand grains and DOLOMITE: brown-gray, lithographic, porcelaneous.
8125	8140	DOLOMITE: cream-brown and gray-brown, micro-crystalline, vitreous, porcelaneous.

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SAMPLES FROM 8140 TO 8604 EXAMINED BY _____ DATE _____

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
8140	8159	DOLOMITE: cream-brown, medium crystalline, porcelaneous, with traces of quartzite-filled veinlets, grading to DOLOMITE: dark gray, fine crystalline, vitreous.
8159	8172	CORE NO. 21. Recovery 7 feet. DOLOMITE: dark gray to brownish-gray, fine to medium crystalline, very hard, common pin-hole porosity, slightly sucrose, slightly vitreous, brittle, splintery. Entire recovered core heavily fractured and completely shattered. Fractures generally closed, but occasionally coated with a film of calcite. Poor dip checks of 20°. Lower foot of recovered core, in part, very SANDY: medium grain, sub-angular to sub-rounded in matrix of siliceous dolomite.
8172	8245	DOLOMITE: milky cream-brown, lithographic, very porcelaneous, becoming slightly sucrose in lower part.
8245	8250	DOLOMITE: dark gray, fine crystalline, vitreous, shaly, siliceous.
8250	8320	DOLOMITE: brownish-smoky gray, lithographic, slightly porcelaneous, very slightly shaly.
8320	8340	DOLOMITE: black, micro-crystalline, very vitreous, very shaly.
8340	8440	DOLOMITE: brownish-gray to grayish-brown, lithographic, slightly vitreous to dull, slightly shaly.
8440	8470	DOLOMITE: gray, dense, slightly vitreous, hard, very siliceous, grading to thin bedded micro and medium crystalline, vitreous, sandy.
8470	8500	DOLOMITE: dark gray and dark brownish-gray, micro-crystalline, very vitreous, shaly, sucrose.
8500	8580	DOLOMITE: dark brownish-gray, micro-crystalline, sucrose, very vitreous, slightly siliceous, becoming darker and increasingly sucrose. Common black, carbonaceous, slickensided shale partings.
8580	8604	DOLOMITE: cream-brown to smoky gray, micro-crystalline, porcelaneous, vitreous, sucrose.
8604	8617	CORE NO. 22. Recovery 13 feet. 4 feet - DOLOMITE: dark gray, fine sucrose, vitreous, hard, slightly silty. Moderately to heavily fractured. Fractures coated with calcite. 9 feet - DOLOMITE: smoky gray, crypto-crystalline, vitreous, very hard, porcelaneous, slightly silty, slightly siliceous. Dip checks fair to

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SAMPLES FROM 8604 TO 9010 EXAMINED BY DATE

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
		Core No. 22 - cont'd.
		good of 30° along abundant thin bedded, carbonaceous-coated stylolites. Abundant vugs usually filled with dolomite and occasionally with calcite. At 8613, fault dipping 50° (probably minor displacement). Abundant slickensided shale partings. Very heavily fractured and shattered. No shows of gas or oil.
8617	8735	DOLOMITE: dark gray grading to smoky gray and brown, micro to fine crystalline, sucrose, porcellaneous, hard, vitreous with rare slickensided, black, carbonaceous shale partings.
8735	8740	SILTSTONE: white, very fine grain, dolomitic, sucrose, friable.
8740	8865	DOLOMITE: cream-brown and smoky gray, fine to micro-crystalline, very sucrose, very vitreous, porcellaneous, slightly siliceous.
8865	8877	DOLOMITE: cream-brown, medium to coarse crystalline, slightly vitreous, pure.
8877	8889	CORE NO. 23. Recovery 3 feet.
		DOLOMITE: smoky gray, fine sucrose, hard, brittle, pure, slightly vitreous, frosty, very heavily fractured and completely shattered. Vugs are common open to partially filled with calcite. Good permeability and porosity in vugs and fractures. No shows of gas or oil.
8889	8953	DOLOMITE: smoky gray grading to darker, micro to fine crystalline, very sucrose, frosty, vitreous, siliceous.
8953		SECOND TOP LAKETOWN DOLOMITE.
8953	8971	DOLOMITE: cream and cream-brown, coarse crystalline, slightly vitreous, slightly porcellaneous, hard, pure.
8971	8987	CORE NO. 24. Recovery 16 feet.
		DOLOMITE: cream-gray, coarse to very coarse crystalline, slightly vitreous, slightly porcellaneous, hard, tight, with streaks of carbonaceous material, very heavily fractured. Fractures unoriented, closed, unmineralized. Few small open to partially closed vugs, becoming moderately fractured and very vuggy. Vugs are scattered, open up to 1/2" diameter. Bottom 6 feet of core very heavily fractured at top of core. Very poor, unreliable dip checks on stylolites of 25-30°. No shows of gas or oil.
8987	9010	DOLOMITE: as above core.

Form 9-331 a
(Feb. 1951)

Budget Bureau 42-R358.4
Approval expires 12-31-52.

(SUBMIT IN TRIPLICATE)

Land Office Salt Lake
Lease No. 069312
Unit Bishop Springs

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ORIGINAL FORWARDED TO CASPER

RECEIVED
JUN 11 1952
U.S. GEOLOGICAL SURVEY
SALT LAKE CITY, UTAH

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL	X		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

June 9, 19 52

Well No. 1 is located 8822.45 ft. from {N/S} X line and 11,456.88 ft. from {E/W} X line of sec.

NW/C of Section 1 (When surveyed should be in the C NW¼SW¼ 1-16S-17W)
(¼ Sec. and Sec. No.)

16S (Twp.) 17W (Range) Salt Lake Base (Meridian)

Wildcat (Field) Millard (County or Subdivision) Utah (State or Territory)

The elevation of the derrick floor above sea level is ..... ft.

DETAILS OF WORK

Bishop Springs Unit No. 1.

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

13-3/8" OD Casing set 522' and cemented with 425 sacks cement. Circulated. TD 9058' Chart topped 9042'. Will have hole full of heavy mud. Will place 40 sacks cement to fill 25' below surface casing shoe and 25' up in surface casing. Will place 10 sacks cement in top of surface pipe and bottom of cellar with piece 4" pipe cemented in cellar extending 4' above ground level. A cap will be welded on top of 4" marker. Cellar and rat hole will be filled slightly above ground level. Verbal approval granted 6-9-52, by Mr. Charles Heuptmann to Plug & Abandon.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Gulf Oil Corporation

Address 134 E. Midwest Ave.

Casper, Wyoming

Approved JUN 12 1952
C. Heuptmann
District Engineer

By

Title District Superintendent.

U. S. GOVERNMENT PRINTING OFFICE 16-8427-4

Form 9-331a
(Feb. 1951)

Budget Bureau 42-R358.2
Approval expires 12-31-52.

(SUBMIT IN TRIPLICATE)

Land Office Salt Lake

Lease No. 069312

Unit Bishop Springs

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	SUBSEQUENT REPORT OF WATER SHUT-OFF
NOTICE OF INTENTION TO CHANGE PLANS	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING
NOTICE OF INTENTION TO TEST WATER SHUT-OFF	SUBSEQUENT REPORT OF ALTERING CASING
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL	SUBSEQUENT REPORT OF REDRILLING OR REPAIR
NOTICE OF INTENTION TO SHOOT OR ACIDIZE	SUBSEQUENT REPORT OF ABANDONMENT
NOTICE OF INTENTION TO PULL OR ALTER CASING	SUPPLEMENTARY WELL HISTORY
NOTICE OF INTENTION TO ABANDON WELL	Subsequent Report to Abandon Well X

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

June 17, 1952

Well No. 1 is located 8822.65 ft. from {N} line and 11,455.88 ft. from {E} line of sec.

NW/C of Section 1 (¼ Sec. and Sec. No.) 16S (Twp.) 18W (Range) Salt Lake Base (Meridian)

Wildcat (Field) Millard (County or Subdivision) Utah (State or Territory)

The elevation of the derrick floor above sea level is ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

13-3/8" OD Casing set 522' and cemented with 425 sacks cement, circulated. TD 9058' Chert, topped 9042'. Had hole full of heavy mud, placed 35 sacks Utah Portland Cement plug from 544 to 494'. Capped top of surface pipe up in cellar with 10 sacks plug. Cemented piece of 4" pipe in cellar to extend 4' above ground level as marker. Welded cap on top of marker.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Gulf Oil Corporation

Address 134 E. Midwest Ave.

Casper, Wyoming

DEC 1 0 1952

Approved (Orig. Sgd.) H. C. Seaville Engineer

By

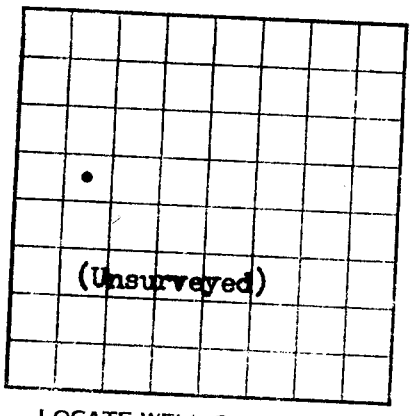
Title District Superintendent

U. S. GOVERNMENT PRINTING OFFICE 16-8687-6

Form 9-330

Budget Bureau No. 42-R355.2.
Approval expires 12-31-52.

U. S. LAND OFFICE Salt Lake City
SERIAL NUMBER
LEASE OR PERMIT TO PROSPECT



LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

AUG 14 1952

ORIGINAL FORWARDED TO CASPER

LOG OF OIL OR GAS WELL

Company Gulf Oil Corporation Address 311 David Keith Building Salt Lake City, Utah

Lessor or Tract U.S.Lease #069312 Field Bishop Springs Unit State Utah

Well No. 1 Sec. 8 T. 16S R. 17W Meridian SL

Location 8822.65 ft. {N.} of S Line and 11,455.88 ft. {E.} of W Line of NW corner Sec. 1-16S-18W County Millard Elevation 5768 Gr. (Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Date July 29, 1952 Signed R C Hayward

Title Acting Area Manager

The summary on this page is for the condition of the well at above date.

Commenced drilling October 7, 1951 Finished drilling June 10, 1952

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from None to
No. 2, from to
No. 3, from to
No. 4, from to
No. 5, from to
No. 6, from to

IMPORTANT WATER SANDS

No. 1, from None to
No. 2, from to
No. 3, from to
No. 4, from to

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated From—	Perforated To—	Purpose
13-3/8"	54.5	8	J-55	522	Conv.	In hole	None	---	Surface Csg.

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
13-3/8"	522'		HOWCO		

PLUGS AND ADAPTERS

Heaving plug—Material None Length Depth set

Adapters—Material Size

SHOOTING RECORD

FOLD | MARK

FOLD | MAR

PLUGS AND ADAPTERS

Heaving plug—Material ... None ... Length ... Depth set

Adapters—Material ... Size ...

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
		None				

TOOLS USED

Rotary tools were used from Surface feet to ~~9660~~ TD feet, and from ... feet to ... feet

Cable tools were used from ... feet to ... feet, and from ... feet to ... feet

DATES

..., 19...

Put to producing P & A June 10, 1952

The production for the first 24 hours was ... barrels of fluid of which ... % was oil; ... % emulsion; ... % water; and ... % sediment

Gravity, °Bé. ...

If gas well, cu. ft. per 24 hours ... Gallons gasoline per 1,000 cu. ft. of gas ...

Rock pressure, lbs. per sq. in. ...

EMPLOYEES

Drilled by Mt. States ..., Driller

Drilling Co., Inc.-Denver, Colo. Driller ..., Driller

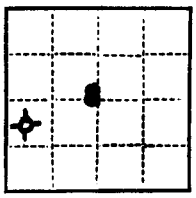
... Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
			See Record Attached

OVER

Form 9-329
(April 1944)



BULLETIN 50
14-2

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
CONSERVATION DIVISION

Sec. 8
T. 16 S.
R. 17 W.
S. L. Mer.

INDIVIDUAL WELL RECORD

PUBLIC LAND: Date December 18, 1952 Ref. No. 1

Land office Salt Lake City — State Utah

Serial No. 069312 — County Millard

Lessee Gulf Oil Corporation, et al. — Field ~~Bishop Springs Unit~~ WC

Operator Gulf Oil Corporation — District Salt Lake City

Well No. 1 — Subdivision NW¼SW¼

Location 8822.65 ft. S. and 11,455.88 ft. E. of NW Corner sec. 1, T.16 S., R.18 W.

Drilling approved October 3, 19 51 — Well elevation 5768 feet

Drilling commenced October 7, 19 51 — Total depth 9058 feet

Drilling ceased June 10, 19 52 — Initial production

Completed for production ....., 19 — Gravity A. P. I.

Abandonment approved December 18, 19 52 — Initial R. P.

Geologic Formations		Productive Horizons		
Surface	*Lowest tested*	*Name*	*Depths*	*Contents*
Pilot Shale (Miss.)	Chert			Dry Hole

WELL STATUS

YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1951										Drg	Drg	Drg
1952	Drg	Drg	Drg	Drg	Drg	Abd						P&A 9058'

REMARKS Unsurveyed Land

(over) REPLACEMENT SHEET

U. S. GOVERNMENT PRINTING OFFICE 16—38057-8

43-027-11476
OPERATOR TIGER OIL CO. RE ENTRY.

Gulf Oil Corporation

CASPER PRODUCTION AREA

L. W. LeFavour
AREA PRODUCTION MANAGER
B. W. Miller
AREA EXPLORATION MANAGER

P. O. Box 1971
Casper, Wyo. 82601

March 3, 1967

The State of Utah
Oil & Gas Conservation Commission
348 East South Temple - Suite 301
Salt Lake City, Utah 84111

Re: Well No. Gulf Oil Corp. No. 1
Section 8, T 16S, R 17W
Millard County, Utah

Miss Sharon Cameron

Replying to your letter dated February 28, 1967, requesting logs on subject well, we wish to advise that this well is located outside the area in which this office operates.

We are forwarding your letter to our Roswell, New Mexico, office for handling, and you should hear from them shortly.

Very truly yours,

R. O. Charles

EBH:rlk

cc: Gulf Oil Corporation
P. O. Box 1938
Roswell, New Mexico

DRILLERS LOG

Gulf #1 Bishop Springs

Section 8-16S-17W, Millard County, Utah

Depth	Lithology	Formation
0 - 625	Shale & Siltstone	Pilot
625 - 940	Lmst, Sltst & Shale	Pilot
940 - 1295	Dol, Lmst & Siltstone	Guilmette
1295 - 1900	Dol, Limestone	Guilmette
1900 - 2000	Dol, Shale	Guilmette
2000 - 2085	Dol , Shale	Pilot
2085 - 2300	Interbed Lmst & Shale	Pilot
2300 - 3391	Interbed Lmst & Dol	Guilmette
3391 - 3675	Lmst w/Shale & SS	Guilmette
3675 - 4371	Interbed Dol & Lmst w/Breccia	Guilmette
4371 - 4610	Lmst & Shale	Guilmette
4610 - 5268	Lmst w/some Dolomite	Guilmette
5268 - 6000	Dolomite w/some Lmst	Simonson
6000 - 6770	Dolomite w/some Lmst & SS	Sevy
6770 - 7440	Dolomite & Chert at top	Laketown
7440 - 8110	Dolomite w/Lmst & Breccia	Simonson
8110 - 8953	Dolomite w/some Siltstone	Sevy
8953 - 9058	Dolomite w/Chert	Laketown
9058	TD	

Gulf Oil Corporation

ROSWELL PRODUCTION DISTRICT

W. B. Hopkins
DISTRICT MANAGER
M. I. Taylor
DISTRICT PRODUCTION MANAGER
F. O. Mortlock
DISTRICT EXPLORATION MANAGER
H. A. Rankin
DISTRICT SERVICES MANAGER

P. O. Drawer 1938
Roswell, New Mexico 88201

March 17, 1967

The State of Utah
Oil & Gas Conservation Commission
348 East South Temple, Suite 301
Salt Lake City, Utah 84111

Re: Gulf Oil Corporation
Bishop Springs No. 1,
Section 8, T-16S, R-17W,
Millard County, Utah

Gentlemen:

As requested in your letter of February 28, 1967, attached hereto please find Driller's Log, Electric Log and Radioactivity Log for subject well.

Yours very truly,

W. B. Hopkins

Attachments

BB:sz

323-2071

ENVIRONMENTAL ENGINEERING COMPANY
Professional Engineering Services

P. O. Box 3341
Casper, Wyoming 82601
Phone (307) 234-6186

1645 Court Place
Suite 229
Denver, Colorado 80202
Phone (303) 892-1506

October 6, 1977

Mr. Ed Guynn, District Engineer
U. S. Geological Survey
3440 Federal Building
125 South State Street
Salt Lake City, Utah 84138

Re: Lease U-26743
E.M. Davis dba Tiger Oil
#1 - USA Bishop Springs, (An OWDD)
2629'FSL, 5130'FEL
Sec. 8, T 16S - R 17 W
Millard Co., Utah

Dear Ed:

As you requested, enclosed is application to drill (Form 9-331C) and surface use plan to re-enter the old Gulf well drilled in 1952, as above.

Two alternate locations will be filed separately after staking and examination is completed on the #3 well. An archaeologist has already been employed to examine all drill pad areas as well as all roads.

Since 1952 the old Gulf drill pad will only need slight enlargement for a deeper hole.

Would you kindly destroy the previous APD Form 9-331C sent you September 16, 1977 as it is no longer applicable.

Tiger Oil would like to commence operations in the old hole as soon as possible so therefore, I would appreciate an early approval to this request, and request ground inspection be waived if possible.

Please note that the old Gulf well is only 150' from the west line of Section 8. Tiger Oil owns the leases in Section 7 and the BLM owns all the minerals and surface. The nearest lease held by other parties is 1½ miles to the northwest.

Please send copy of this filing to the Fillmore, Utah office of the B.L.M.

Best Wishes!

cc/ George H. Fentress

George H. Fentress

GHF/da
cc: Tiger Oil
encl.

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL ☐ DEEPEN ☒ PLUG BACK ☐

b. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ OTHER — SINGLE ZONE ☐ MULTIPLE ZONE ☐

2. NAME OF OPERATOR
Edward Mike Davis dba Tiger Oil Company

3. ADDRESS OF OPERATOR
1920 Colorado State Bank Bldg., Denver, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
2629' FSL, 5130' FEL (re-surveyed)
At proposed prod. zone
Same

5. LEASE DESIGNATION AND SERIAL NO.
UT-26743

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
--

7. UNIT AGREEMENT NAME
--

8. FARM OR LEASE NAME
Federal

9. WELL NO.
#1-USA Bishop Spgs.

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
8-T16S-R17W

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
105 miles east of Ely, Nevada (or 134 miles W. of Delta, UT)

12. COUNTY OR PARISH: Millard | 13. STATE: Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 150'-see cover letter

16. NO. OF ACRES IN LEASE: 2,559.00 ac.

17. NO. OF ACRES ASSIGNED TO THIS WELL: 80 acres

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: none

19. PROPOSED DEPTH: 17,500'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
5792' Ground by Powers

22. APPROX. DATE WORK WILL START*
Nov. 1, 1977

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
--	13 3/8 new	54.5, J-55	522	425 sx. reg. cement
12 1/4	9 5/8 new	36 # K-55	5,000	400 sx. reg. cement
8 3/4	5 1/2 new	20#-17#-15# J-55	17,500	500 sx. 50-50 +

1. Re-enter old Gulf Oil Corp. hole, remove 4" marker, drill 35 sacks cement ~~494-544'~~, and 10 sacks cement in top of surface casing. ol pl
2. Drill out and ream the old "heavy mud" in hole to OLD TOTAL DEPTH of 9058', as reportably bottomed in "chert".
3. Drill hole to 17,500' bottomed in Pre-Cambrian and test all shows of oil or gas to that depth. Set intermediate casing as set out above.
4. Blowout preventers will be installed and tested periodically as set out in Exhibit C and #5 of Exhibit D on attached Environmental NTL-6 Statements.
5. Electric logs will be run as noted in #8 of Exhibit D of NTL-6.
6. If oil or gas in commercial or other quantities anticipated are found, then casing will be run as in 23 above, in a 9-inch hole as needed to test or to produce anticipated production. - Exhibits "A" through "H" are attached giving location plat, 10-point program, B.O.P., multipoint surface use, access maps, rig and drill pad layouts.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. George H. Fentress
SIGNED George H. Fentress TITLE Consultant Representative Tiger Oil Company DATE October 6, 1977

(This space for Federal or State office use)

PERMIT NO. 43-027-11476 APPROVAL DATE

APPROVED BY TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

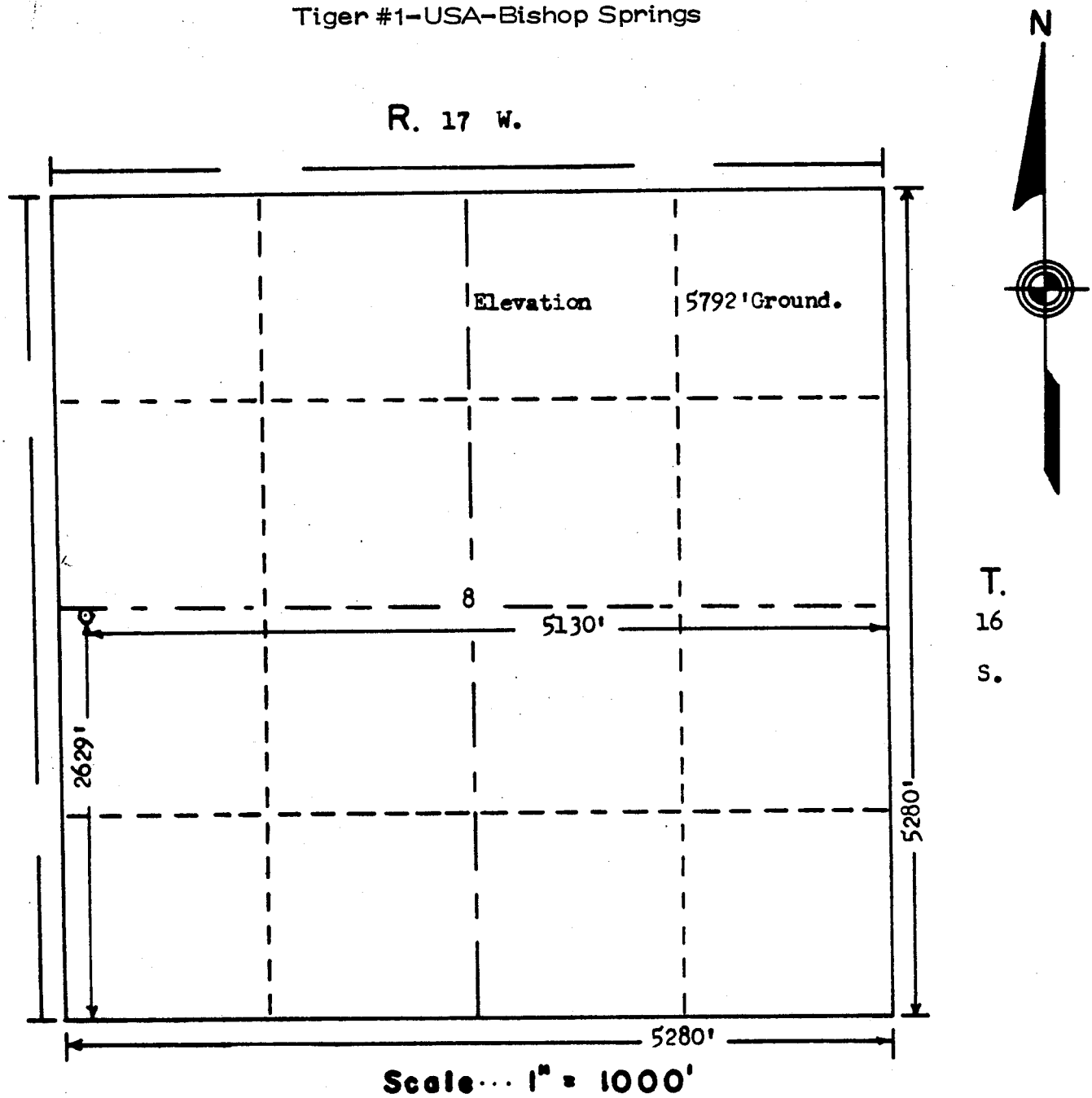
*See Instructions On Reverse Side

FORM F-106

EXHIBIT "A"

Elevation & Location Plat

Tiger #1-USA-Bishop Springs



Scale··· 1" = 1000'

Powers Elevation Company, Inc. of Denver, Colorado has in accordance with a request from George Fentress **for** Edward Mike Davis(DBA) Tiger Oil Company **determined the location of** #1 Usa-Bishop Springs **to be** 2629'FS & 5130'FE **Section** 8 **Township** 16 S. **Range** 17 W. of the Salt Lake Principal **Meridian** Millard **County,** Utah

I hereby certify that this plat is an accurate representation of a correct survey showing the location of #1 USA*Bishop Springs

Date: 9-23-77

T Nelson

Licensed Land Surveyor No.2711
State of Utah

EXHIBIT "B".
TEN-POINT COMPLIANCE PROGRAM
of NTL-6 Approval of Operations

Attached to Form 9-331 C

Edward Mike Davis d/b/a/ Tiger Oil Company

#1 USA Bishop Springs (an OWDD)
2629' FSL 5130' FEL (or 7110'S 3300'E of NW/C 5-16S-17W)
Sec. 8 - T 16 S - R 17 W
Millard County, Utah

1. Geologic Surface Formation

Quaternary alluvium and colluvium agglomerations of gravels resting on Mississippian Pilot shales.

2. & 3. Important Geologic Markers

Geologic Formation	Estimated Depth	Anticipated Fluids
Guilmette Fm.	625	water
Simonson Dolo.	5,265	-----
Laketown Dolo.	6,770	-----
Simonson Dolo. (repeat)	7,570	water
Eureka Sand.	11,000	-----
Pogonifs Group	12,500	-----
Notchpeak	14,500	oil
Orr Group	17,400	oil
Total Depth	17,500	-----

(Fluids anticipated only as noted)

4. Proposed Casing Program

A new and/or used casing program is specified in Item 23 of the attached A. P. D. Form 9-331 C.

5. Operator's Minimum Specifications for Pressure Control Equipment

EXHIBIT "C" is a schematic diagram of the blowout preventer equipment planned for use in this well.

The BOP's will be hydraulically tested to full working pressure after nippling up and after any use under pressure. Pipe rams will be operationally checked each 24-hour period. The blind rams and annula preventer will be checked each time pipe is pulled out of the hole. All testing will be recorded in the daily drill sheets.

Accessories to BOP's include upper and lower kelly cocks, floor safety valve, drill string BOP and choke manifold with pressure rating equivalent to the BOP stack.

6. Type and Characteristics of Proposed Circulating Medium

(1) 0 - 5000' will clean out old 9.0 to 10.0# mud with water and a dispersed system to reach old T.D. with 10 cc W.L., 50-60 visc. and 9# mud to get job done. Probably will set intemediate casing here.

(2) 5000' - 17,500' will continue a dispersed system of (1) above except will have sufficient barite, lost circulation materials and additives to keep good mud and provide for any increased pressures or occurance of H_2S gases, etc.

7. Auxiliary Equipment to be Used

(a) A kelly cock will be kept in the string at all times.

(b) A float may be used at the bit at all times.

(c) A mud logging unit and gas detecting device may be used to monitor the system.

(d) A stabbing valve will be on the floor to be stabbed into the drill pipe when kelly is not in the string.

8. Testing, Logging, and Coring Programs to be Followed

(a) Testing is anticipated in the Notchpeak and Orr Group.

(b) An IES log will be run from 17,500 to surface casing including Section to OTD for correlation purposes. FDC gamma ray, caliper and other logs will be run from 9058' to new Total Depth, and other logs as deemed desireable.

(c) No coring is anticipated, but not precluded.

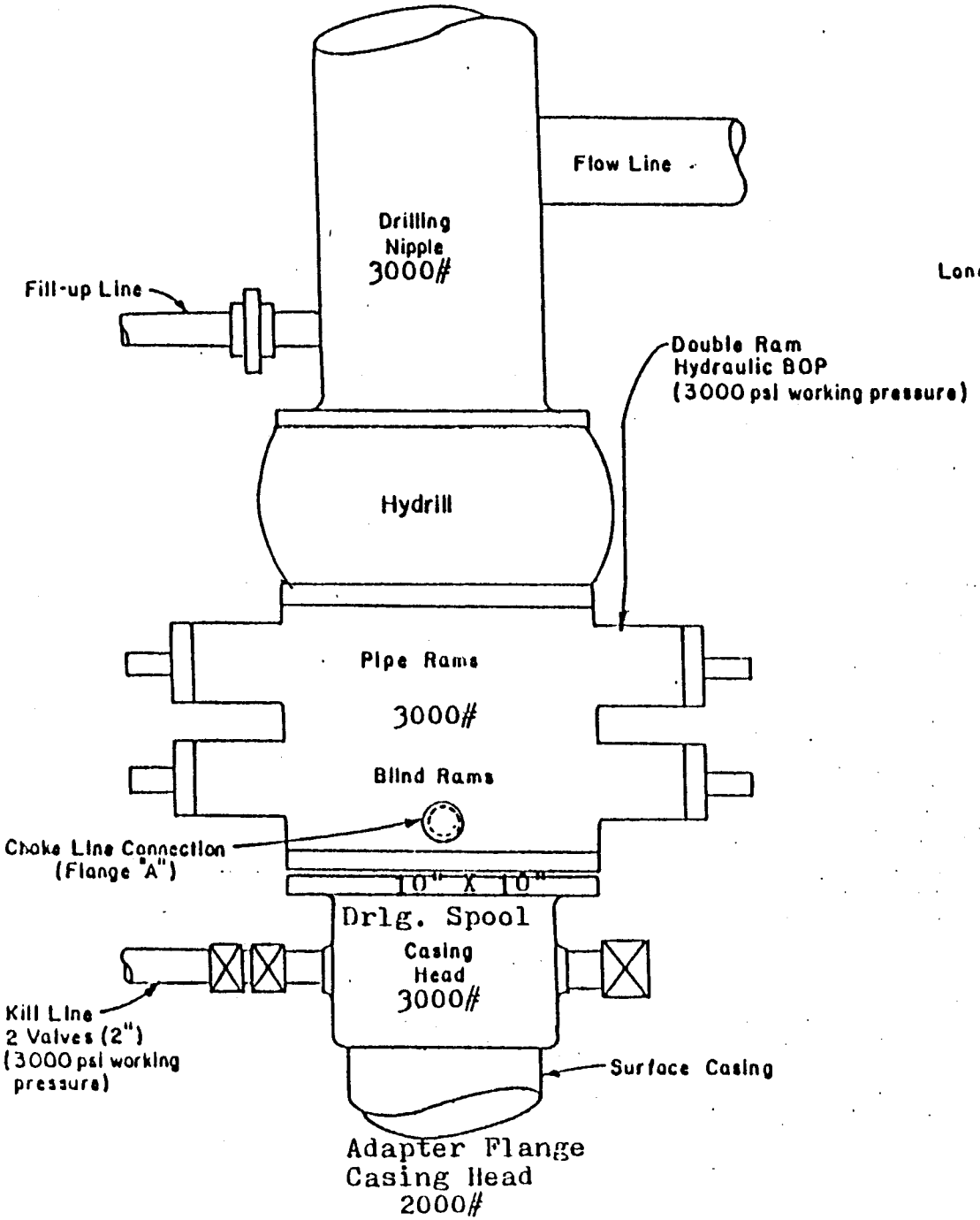
9. Anticipated Abnormal Pressures or Temperatures Expected

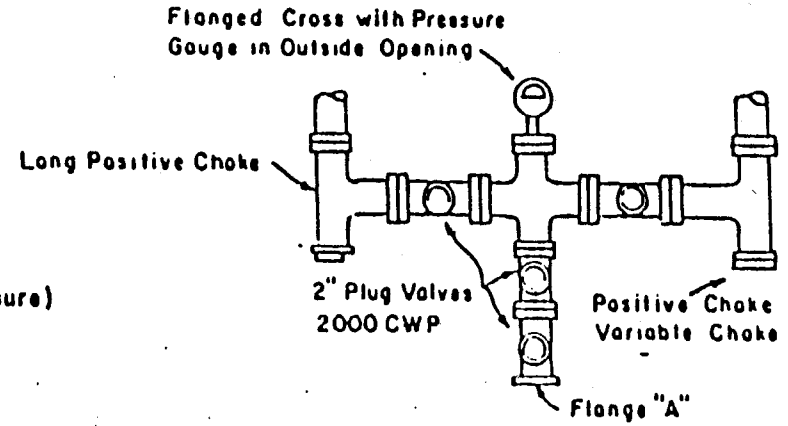
No abnormal pressures or temperatures have been noted or reported in wells drilled in the area at the depths anticipated for this well, nor in the old hole.

Minor amounts of hydrogen sulfide gas was noted in the old hole but is not considered of consequence. However, protective materials, detectors and other equipment will be on location together with a contingency plan available if needed.

10. Anticipated Starting Date and Duration of the Operation

The anticipated starting date is set for November 1, 1977 and operations should be completed within three months from the spudding of the well to the 17,500' depth.





PLAN VIEW - CHOKE MANIFOLD

EXHIBIT "C"

BLOWOUT PREVENTER DIAGRAM

Tiger Oil #1-USA Bishop Springs

EXHIBIT "D"

MULTIPOINT REQUIREMENTS TO ACCOMPANY APD

Attached to Form 9-331 C

Edward Mike Davis d/b/a Tiger Oil Company
#1 USA Bishop Springs (An OWDD Well)
2629' FSL 5130' FEL
Sec. 3 - T 16 S - R 17 W
Millard Co., Utah

1. Existing Roads

A. The proposed well site and elevation plat are shown on Exhibit "A".

B. The location is 105.5 miles east of Ely, Nevada, 134.5 miles west of Delta, or 44.5 miles northeast of Paved U.S. 6-50 as shown on Exhibit "E".

C. Access is 8.0 miles from a county road and use of the old hole and drill pad will not requre any further road construction than now exists.

D. This is a wildcat exploration well and all roads within three miles are on Exhibits "E" & "F".

E. This is not a development well.

F. The only plan for existing roads is to blade the no more than half dozen very small washed areas in the natural gravels on the surface of this area. All existing roads still have drainage bars on either side.

2. Planned Access Roads

No new access roads are required for this location recommended.

(1) The present width, with existing drainage is about 12 to 16 feet variable.

(2) Maximum grades are 3 degrees.

(3) No turnouts are necessary.

(4) No drainage design different than now exists is planned. Small portions of the road exists in flat drainage channels where best travel conditions are found.

(5) No culverts or cut-fill are planned.

(6) One cannot improve upon the natural gravels existing on all roads, and off the roads.

(7) No gates cattleguards or fence cuts are needed, as this is open range grazing BLM lands.

(8) No new access will be built.

3. Locations of Existing Wells

All existing wells are shown on Exhibit "F".

(1) There is one water well casing on the old well location. No others are known to exist within 10 miles.

(2) The one abandoned well is planned for re-entry here.

(3), (4), (5), (6), (7), (8), and (9) - No other type of wells are known to exist in the area.

4. Location of Existing and/or Proposed Facilities

A. (1), (2), (3), (4), (5), (6) - There are no known or observed oil or gas production facilities or lines, buried or unburied.

B. It is contemplated that production will be obtained. The production facilities are all located on the solid ground cut area of the drill pad, as shown on Exhibit "H".

(1) All facilities are planned for use on the newly leveled well pad.

(2) The dimensions of the facilities are drafted on Exhibit "H" as shown, and to approximate scale.

(3) There are plentiful surface gravels, but any sand or concrete used will be purchased from private sources.

(4) To protect livestock and wildlife, all pits with undesireable water or other fluids, and all moving parts will be fenced. If the fluid is unsafe, then flagging will be placed overhead. If oil, then a wire mesh covering will be placed over the oil collection pit, unless or until removed.

C. Rehabilitation, whether the well is productive or dry, will be commenced on all unused areas in accordance with restoration plans presented in Item 10 following, and in accordance with other provisions made herein.

5. Water Supply

A. Water will be obtained by either (a) cleaning out the old water well on location, or (b) purchase from the private owner of the 5 to 6 sec. ft. flowing Foote Reservoir, seen on Exhibit "F".

B. Transportation of any water used will be by trucks on existing roads or by pipeline as shown on Exhibit "F".

C. No water well is anticipated to be drilled, other than the one already existing for temporary use.

6. Construction Materials

A, B, C & D. No construction material is needed for drilling except as may have been noted previously. In the event of production, any materials needed are planned as purchase from pri vate sources.

7. Handling Waste Disposals

(1) Drill cuttings will be buried in reserve pit.

(2) Drilling fluids will be handled in the reserve pit.

(3) Any produced fluids during drilling tests or while making production tests will be collected in a test tank. If a test tank is not available then any and all unavoidable spills of oil, salt waters or gases, or other obnoxious fluids will be cleaned up and removed immediately if and when that occurs.

(4) Any sewage accumulated will be covered or removed.

(5) Garbage, wastes and non-flammable wastes, salts and other chemicals produced or used during drilling operations or testing will be handled in the reserve pit or kept in the trash or burn pit, all shown on Exhibit "H". The trash or burn pit will be covered with small mesh wire to prevent scattering before being burned or buried.

(6) The reserve pit, if mud is used, will be fenced on three sides during drilling operations, and iron or other posts and wire fencing will be available on location immediately upon cessation of drilling and the fourth side of the reserve pit will be fenced prior to full removal of the rig from the location. Any other dangerous or harmful pits or sewage areas will also be fenced or covered at the time rig moves off location.

8. Ancillary Facilities

No airstrips, camps, or other living facilities will be built or needed, unless significant production is obtained.

9. Well Site Layout

(1) Exhibit "G" is the drill pad layout. Elevation contours have been drawn on the plat, and cross sections drawn from these contours. Soil banks are noted on the sections.

(2) Exhibit "H" shows the orientation of the drill rig, reserve pit, mud tanks, parking, soil bank locations, and other information. If a test tank is used, it will be as shown on the lay-out.
No living facilities are anticipated, except temporary trailers.

(3) Exhibit "H" shows rig orientation, parking and road in to drill pad.

(4) The reserve pit will not be lined. Steel mud pits, if used, will be as shown in Exhibit "H".

10. Plans for Restoration

(1) Backfilling, leveling and contouring will be accomplished as soon as possible after plugging of the well, or immediately on those areas unused if production is obtained. Waste disposal and spoils materials will be buried or hauled away immediately before rig moves off location.

(2) Rehabilitation will be accomplished by spreading the banked top soil over the area and contouring the banks. Revegetation will be accomplished using grasses or mixtures best suited for the conditions encountered here. The access road will be revegetated as needed, but it may be preserved for continued use if requested.

(3) Prior to rig release, the fourth side of the reserve pit will be fenced and maintained until clean up operations are finished.

(4) Any oil or spills will be immediately cleaned up or flagged.

(5) Rehabilitation operations will commence as soon as the rig moves off location. Removal of oil or flagging, fencing and other clean up will begin immediately.

Planting and revegetation will be considered as best commenced beginning in the spring of 1978, unless requested or recommended otherwise.

11. Other Information

(1) The topography is an almost typical "sheepherder's anticline" basinal area covered heavily a with Quaternary gravels, alluvial and colluvial, spread everywhere except for the up turned cliffs to the east and west of harder Ely limestone.

There is sparse soil, as with the vegetation of 10% to 40% straw flowers, native grasses, and almost nothing except sand and gravels. No animals were seen, although small holes were occasionally found. The location itself already flattened from previous drilling, showed nothing peculiar to indicate animal or bird problems, although sheep, cattle and other animals and birds obviously exist in various amounts in this sparsely inhabitated area.

(2) The surface ownership is BLM and is used for grazing.

(3) The closest dwelling is at Gandy some 15 miles away. Corrals exist at 8.0 miles from location on the county road exit. The area is to be examined archaeologically entering the 7.2 miles into the area of all locations being staked and exiting on a road southwestward to make certain no disturbance of such features will occur. No historical or cultural sites were seen anywhere near the entire area.

The closest flowing water is the Bishop Springs area seen on Exhibit "F" where the Foote Reservoir was constructed to impound the 5-6 sec. - feet of water flowing up from the bottom of the valley and out of the reservoir into a series of irrigation ditches.

12. Lessee's or Operator's Representative

George H. Fentress
CONSULTANT Representative
Edward Mike Davis, d/b/a
Tiger Oil Company
1645 Court Place, #229
Denver, Colo. 80202
Phone: (303) 825-0561
Res. (303) 279-4880

or

Richard Schneider
R. A. 'Pete' Matuszczak
Edward Mike Davis, d/b/a
Tiger Oil Company
Manager of Exploration
1920 Colorado State Bank Bldg.
Denver, Colo. 80202
Phone: (303) 629-0391
Res: (303) 934-1656

13. Certification

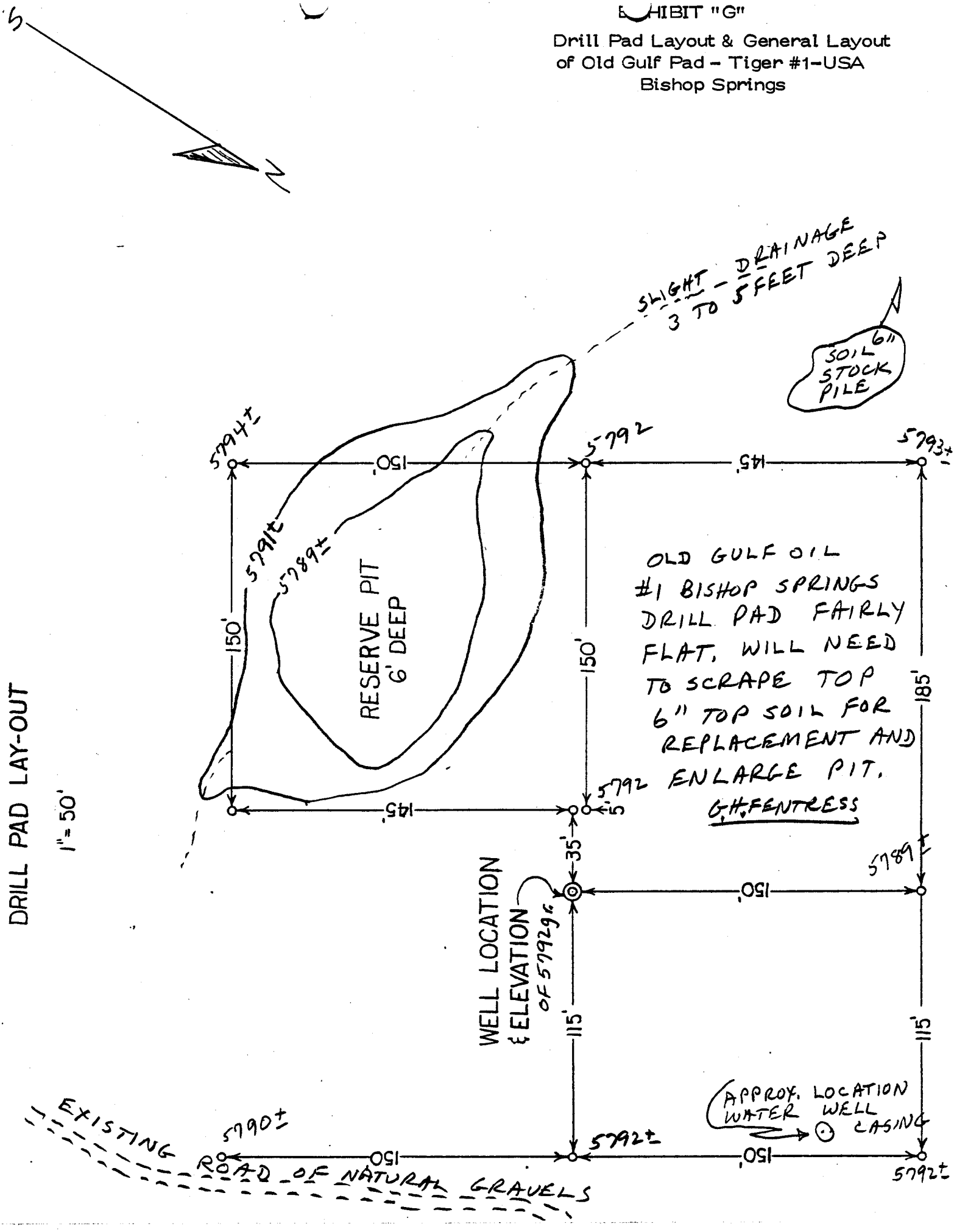
I hereby certify that I, or persons under my direct supervision have inspected the drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Edward Mike Davis, d/b/a Tiger Oil Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

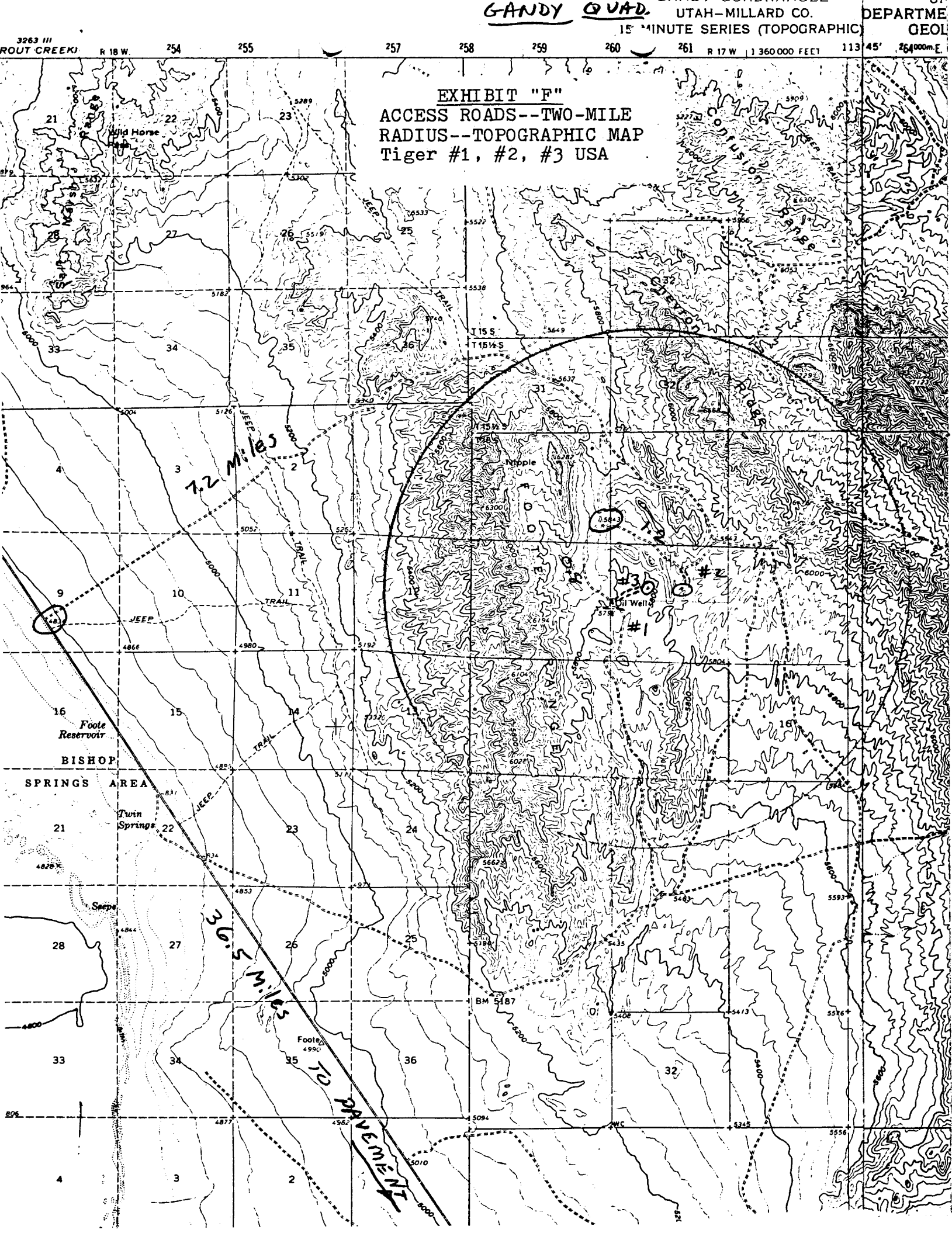
October 6, 1977
Date

George H. Fentress
Consultant Representative for
Edward Mike Davis d/b/a
Tiger Oil Company

EXHIBIT "G"

Drill Pad Layout & General Layout
of Old Gulf Pad – Tiger #1-USA
Bishop Springs




GANDY QUAD.
UTAH–MILLARD CO.
15 MINUTE SERIES (TOPOGRAPHIC)
EXHIBIT "F"
ACCESS ROADS--TWO-MILE RADIUS--TOPOGRAPHIC MAP
Tiger #1, #2, #3 USA
7.2 Miles
36.5 Miles
TO PAVEMENT
#1
#2
#3
Oil Well
Nipple
Foote Reservoir
BISHOP SPRINGS AREA
Twin Springs
Seep
Foote
BM 5187
Wild Horse Pass
Confusion Range
Cleveland Ridge
TRAIL
JEEP

● INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D

GRID ZONE DESIGNATION: 11S	TO GIVE A STANDARD REFERENCE TO THIS SHEET TO NEAREST 1000 METER:
100,000 M. SQUARE IDENTIFICATION	SAMPLE POINT: WARM SPRINGS
NQ PQ QQ	1. Read letters identifying 100,000 meter square in which the point lies:

d by the U.S. Army Topographic Command (FSGE), Washington, compiled in 1955 by photogrammetric methods and from United quadrangles, 1:62,500, 1948-53. Planimetry revised from hotographs taken 1953. Photographs field annotated 1953. in 1972 by the U.S. Geological Survey from aerial photographs 971.

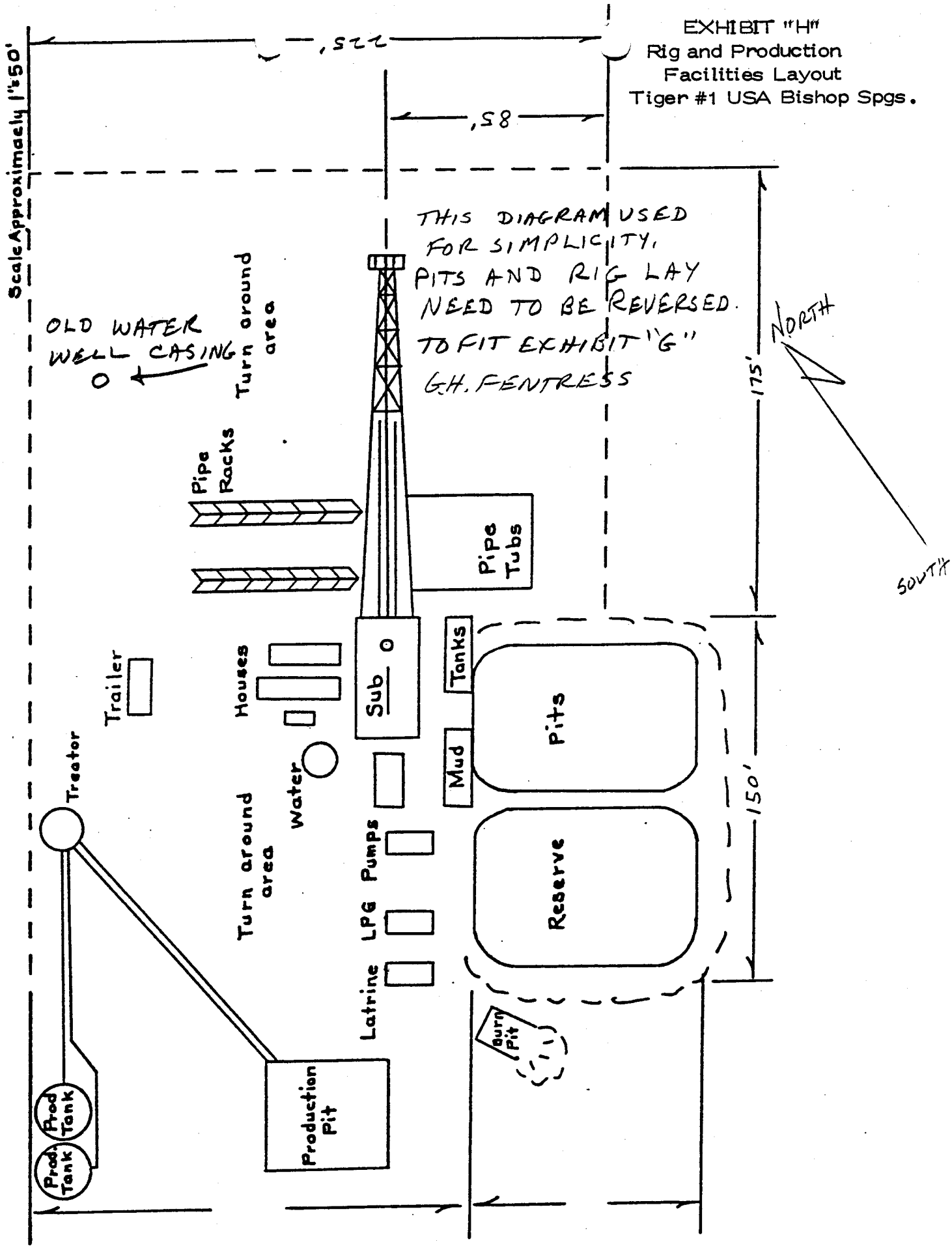
OWNSHIP

2 1

POPULATED

Over 500,0

EXHIBIT "H"
Rig and Production
Facilities Layout
Tiger #1 USA Bishop Spgs.



Re-Entry

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

** FILE NOTATIONS **

Date: Oct. 26

Operator: Inyo Oil Co.

Well No: Bishop Springs #1

Location: Sec. 8 T. 16S R. 17W County: Millard

File Prepared: / / *Entered on N.I.D.:* / /

Card Indexed: / / *Completion Sheet:* / /

API NUMBER: _____

CHECKED BY:

Administrative Assistant

Remarks:

Petroleum Engineer O.K. Put - Note: re-surveyed location is slightly different from the old G.L.O. location

Remarks:

Director _____

Remarks:

INCLUDE WITHIN APPROVAL LETTER:

Bond Required: / / *Survey Plat Required:* / /

Order No. _____ / / *Surface Casing Change to* _____ / /

2199 848 FWL FSL

Rule C-3(c), Topographic exception/company owns or controls acreage within a 660' radius of proposed site / /

2629 FSL 5130 FEL

O.K. Rule C-3 /✓/ *O.K. In* _____ *Unit* / /

Other:

/✓/ ~~Letter Written/Approved~~

re-entry

October 26, 1977

Edward Mike Davis dba
Tiger Oil Company
1920 Colorado State Bank Bldg.
Denver, Colorado 80202

Re: USA Bishop Springs #1
Sec. 8, T. 16 S, R. 17 W,
Millard County, Utah

Gentlemen:

Insofar as this office is concerned, approval to re-enter and deepen the above referred to well is hereby granted.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

PATRICK L. DRISCOLL - Chief Petroleum Engineer
HOME: 582-7247
OFFICE: 533-5771

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the rig number and drilling contractor be identified.

The API number assigned to this well is 43-027-11476.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

CLEON B. FEIGHT
DIRECTOR

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: UT-26743

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: --

1a. TYPE OF WORK: DRILL ☐ DEEPEN ☒ PLUG BACK ☐

7. UNIT AGREEMENT NAME: --

b. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ OTHER — SINGLE ZONE ☐ MULTIPLE ZONE ☐

8. FARM OR LEASE NAME: Federal

2. NAME OF OPERATOR: Edward Mike Davis dba Tiger Oil Company

9. WELL NO.: #1-USA Bishop Spgs.

3. ADDRESS OF OPERATOR: 1920 Colorado State Bank Bldg., Denver, CO 80202

10. FIELD AND POOL, OR WILDCAT: Wildcat

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 2629' FSL, 5130' FEL (re-surveyed)
At proposed prod. zone: Same

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 8-T16S-R17W

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 105 miles east of Ely, Nevada (or 134 miles W. of Delta, UT)

12. COUNTY OR PARISH: Millard | 13. STATE: Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 150'-see cover letter

16. NO. OF ACRES IN LEASE: 2,559.00 ac.

17. NO. OF ACRES ASSIGNED TO THIS WELL: 80 acres

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: none

19. PROPOSED DEPTH: 17,500'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 5792' Ground by Powers

22. APPROX. DATE WORK WILL START*: Nov. 1, 1977

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
--	13 3/8 new	54.5, J-55	522	425 sx. reg. cement
12 1/4	9 5/8 new	36 # K-55	5,000	400 sx. reg. cement
8 3/4	5 1/2 new	20#-17#-~~15# J-55~~ N-80	17,500	500 sx. 50-50 +

1. Re-enter old Gulf Oil Corp. hole, remove 4" marker, drill 35 sacks cement 494-544', and 10 sacks cement in top of surface casing.
2. Drill out and ream the old "heavy mud" in hole to OLD TOTAL DEPTH of 9058', as reportably bottomed in "chert".
3. Drill hole to 17,500' bottomed in Pre-Cambrian and test all shows of oil or gas to that depth. Set intermediate casing as set out above.
4. Blowout preventers will be installed and tested periodically as set out in Exhibit C and #5 of Exhibit D on attached Environmental NTL-6 Statements.
5. Electric logs will be run as noted in #8 of Exhibit D of NTL-6.
6. If oil or gas in commercial or other quantities anticipated are found, then casing will be run as in 23 above, in a 9-inch hole as needed to test or to produce anticipated production. - Exhibits "A" through "H" are attached giving location plat, 10-point program, B.O.P., multipoint surface use, access maps, rig and drill pad layouts.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED George H. Fentress — TITLE Consultant Representative, Tiger Oil Company — DATE October 6, 1977

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY (ORIG. SGD.) E. W. GUYNN — TITLE DISTRICT ENGINEER — DATE DEC 27 1977

CONDITIONS OF APPROVAL, IF ANY:
Campsite proposed in Sec 6.

NOTICE OF APPROVAL

*See Instructions On Reverse Side

State of Utah, Department of Natural Resources
Division of Oil, Gas, and Mining
1588 West North Temple
Salt Lake City, Utah 84116

U.S. GEOLOGICAL SURVEY, CONSERVATION DIVISION

FROM: DISTRICT GEOLOGIST, SALT LAKE CITY, UTAH

TO: DISTRICT ENGINEER, SALT LAKE CITY, UTAH

Well	Location	Lease No.
Tiger Oil Company No. 1 - USA	2,629 FSL - 5,130 FEL, Sec. 8, T16S R17W, SLM, Millard Co., Utah	UT-26745

1. Stratigraphy and Potential Oil and Gas Horizons. Proposed TD of 17,500 feet will collar in gravel and test the Cambrian (Notchpeak & Orr Group). for oil.

Critical tops are predicted at: 620' - Guilmette Fm; 5,260' - Simonson Dolo; 11,000' - Eureka SS; 12,500' - Pogonip Group; 14,500' - Notchpeak Fm; 17,400' - Orr Group; 17,500' - Basement (?) precambrian.

2. Fresh Water Sands.

No data.

3. Other Mineral Bearing Formations. (Coal, Oil Shale, Potash, Etc.)

None

4. Possible Lost Circulation Zones.

No data but several should be anticipated.

5. Other Horizons Which May Need Special Mud, Casing, or Cementing Programs.

Insufficient data

6. Possible Abnormal Pressure Zones and Temperature Gradients. Only normal or subnormal to the depths involved and to the $\rightleftharpoons$ T, P conditions are likely. g, l

Hydrogen sulfide gas encountered in old hole.

7. Competency of Beds at Proposed Casing Setting Points. Probably adequate for the APD casing program

8. Additional Logs or Samples Needed. APD logging program is adequate to define the leasable minerals likely to be penetrated.

9. References and Remarks U.S.G.S. Files, Salt Lake City, Utah. Hole is located less than 2 miles east of prospectively valuable Snake Valley geothermal resource area.

Date: 10-18-77 Signed: Donald C. Alvord

ATTACHMENT 2-A

SUMMARY OF ENVIRONMENTAL IMPACT EVALUATION EIA NO. 753

DATE Oct 20, 1977

OPERATOR Tigee O.L

LEASE # UT 26743

WELL NO. #1-USA Bishop Spgs

LOC. ¼NW ¼SW SEC. 8

T. 16S R. 17W

COUNTY Millard STATE ut

FIELD Wildcat

USGS Evans

BLM Hirschi

REP: Fentress

DIRT Jes Lawson

[O] ENHANCES
[ ] NO IMPACT
[/] MINOR IMPACT
[X] MAJOR IMPACT

		Construction				Pollution				Drilling Production						Transport Operations			Accidents		Others
		Roads, bridges, airports	Transmission lines, pipelines	Dams & impoundments	Others (pump stations, compressor stations, etc.)	Burning, noise, junk disposal	Liquid effluent discharge	Subsurface disposal	Others (toxic gases, noxious gas, etc.)	Well drilling	Fluid removal (Prod. wells, facilities)	Secondary Recovery	Noise or obstruction of scenic views	Mineral processing (ext. facilities)	Others	Trucks	Pipelines	Others	Spills and leaks	Operational failure	
Land Use	Forestry NA																				
	Grazing /	/	/			/	/			/						/	/		/	/	
	Wilderness NA																				
	Agriculture NA																				
	Residential-Commercial NA																				
	Mineral Extraction /	O																			
	Recreation /																				
	Scenic Views /	/	/	/		/	/			/			/			/	/		/	/	
	Parks, Reserves, Monuments NA																				
	Historical Sites	NONE KNOWN																			
	Unique Physical Features /												/								
Flora & Fauna	Birds /	/		/		/	/		/	/			/			/			/	/	
	Land Animals /	/		/		/	/		/	-						/			/	-	
	Fish																				
	Endangered Species	NONE KNOWN																			
	Trees, Grass, Etc. /	/	/	/		-	/			/						/			/	/	
Phy. Charact.	Surface Water /																				
	Underground Water /	.								/										/	
	Air Quality /	/				/			/							/			/	/	
	Erosion /	/		/		/	/			/						/			/		
	Other																				
	Effect On Local Economy /	O								O						O					
	Safety & Health /	/		/		/	/			/						/			/	/	
	Others																				

EIA NO. 753

LEASE Tiger Oil Company UT-26743 DATE 10/20/77

WELL NO. 1-USA Bishop Spgs

LOCATION: NW ¼ SW ¼, SEC. 8, T. 16S, R. 17W,

FIELD Wildcat COUNTY Millard STATE UT

ENVIRONMENTAL IMPACT ANALYSIS - ATTACHMENT 2-B

I. PROPOSED ACTION

Tiger Oil Co (COMPANY) PROPOSES TO DRILL AN OIL AND (REENTRY) Existing & abandoned GAS TEST WELL WITH ROTARY TOOLS TO ABOUT 17500 FT. TD. 2) TO CONSTRUCT A DRILL PAD 210 FT. X 400 FT. AND A RESERVE PIT 90 FT. X 130 FT. 3) TO CONSTRUCT ~~210~~ NO NEW ROAD FT. WIDE X 4 MILES ACCESS ROAD AND UPGRADE 12-16' FT. WIDE X 7.2 MILES ACCESS ROAD FROM AN EXISTING AND IMPROVED ROAD. TO place ☐ GAS ☒ OIL PRODUCTION FACILITIES ON THE DISTURBED AREA FOR THE DRILL PAD AND ☒ TRUCK ☐ TRANSPORT THE PRODUCTION THROUGH A PIPELINE TO A TIE-IN IN SECTION NOT KNOWN AT this Time, T. , R. .

2. LOCATION AND NATURAL SETTING (EXISTING ENVIRONMENTAL SITUATION).

(1) TOPOGRAPHY: ☐ ROLLING HILLS ☐ DISSECTED TOPOGRAPHY ☒ DESSERT OR PLAINS ☐ STEEP CANYON SIDES ☐ NARROW CANYON FLOORS ☐ DEEP DRAINAGE IN AREA ☐ SURFACE WATER site of existing drill site that has shown some natural recovery -

(2) VEGETATION: ☒ SAGEBRUSH ☐ PINION-JUNIPER ☐ PINE/FIR ☐ FARMLAND (CULTIVATED) ☒ NATIVE GRASSES ☒ OTHER chalscale, Indian Rice Grass, Squirrel tail + others -

(3) WILDLIFE: ☐ DEER ☒ ANTELOPE ☐ ELK ☐ BEAR ☒ SMALL MAMMAL ☒ BIRDS ☐ ENDANGERED SPECIES ☒ OTHER Reptiles

No mammals were spotted

(4) LAND USE: ☒ RECREATION ☒ LIVESTOCK GRAZING ☐ AGRICULTURE ☒ MINING ☐ INDUSTRIAL ☐ RESIDENTIAL ☐ OIL & GAS OPERATIONS

Area is used for sheep grazing

REF: BLM UMBRELLA EAR
USFS EAR
OTHER ENVIRONMENTAL ANALYSIS

3. Effects on Environment by Proposed Action (potential impact)

1) EXHAUST EMISSIONS FROM THE DRILLING RIG POWER UNITS AND SUPPORT TRAFFIC ENGINES WOULD ADD MINOR POLLUTION TO THE ATMOSPHERE IN THE LOCAL VICINITY.

2) MINOR INDUCED AND ACCELERATED EROSION POTENTIAL DUE TO SURFACE DISTURBANCE AND SUPPORT TRAFFIC USE.

3) MINOR VISUAL IMPACTS FOR A SHORT TERM DUE TO OPERATIONAL EQUIPMENT AND SURFACE DISTURBANCE.

4) TEMPORARY DISTURBANCE OF WILDLIFE AND LIVESTOCK.

5) MINOR DISTRACTION FROM AESTHETICS FOR SHORT TERM.

6) IF WELL IS successful, could provide jobs & monies into economy of area.

7) Well at site appears to be dry, water will have to be trucked from a spring nearby.

8) Potential H_2S Hazard as 2 old well had "shows" of H_2S.

4. Alternatives to the Proposed Action

1) NOT APPROVING THE PROPOSED PERMIT -- THE OIL AND GAS LEASE GRANTS THE LESSEE EXCLUSIVE RIGHT TO DRILL FOR, MINE, EXTRACT, REMOVE AND DISPOSE OF ALL OIL AND GAS DEPOSITS.

2) DENY THE PROPOSED PERMIT AND SUGGEST AN ALTERNATE LOCATION TO MINIMIZE ENVIRONMENTAL IMPACTS. NO ALTERNATE LOCATION ON THIS LEASE WOULD JUSTIFY THIS ACTION.

3) LOCATION WAS ~~MOVED~~ V door to NE TO AVOID ~~old~~ old Mud pits

☐ LARGE SIDEHILL CUTS ☐ NATURAL DRAINAGE ☒ OTHER And drill pad to be 350'x400' to accomadate Large rig (Tigercat owned)

4) At the site, due to remoteness a temporary camp with cooking & living ~~facilities~~ and sanitary facilities was requested. 100'x200' AREA Adjacent to drill pad on NE corner. The need for proper sewage disposal was discussed (over)

5. Adverse Environmental Effects Which Cannot Be Avoided

1) MINOR AIR POLLUTION DUE TO EXHAUST EMISSIONS FROM RIG ENGINES AND SUPPORT TRAFFIC ENGINES.

2) MINOR INDUCED AND ACCELERATED EROSION POTENTIAL DUE TO SURFACE DISTURBANCE AND SUPPORT TRAFFIC USE.

3) MINOR AND TEMPORARY DISTURBANCE OF WILDLIFE.

4) TEMPORARY DISTURBANCE OF LIVESTOCK.

5) MINOR AND SHORT-TERM VISUAL IMPACTS.

6)

6. DETERMINATION:

(THIS REQUESTED ACTION (~~DOES~~) (DOES NOT) CONSTITUTE A MAJOR FEDERAL ACTION SIGNIFICANTLY AFFECTING THE ENVIRONMENT IN THE SENSE OF NEPA, SECTION 102(2) (C).

DATE INSPECTED 10/20/77

INSPECTOR J. Evans

U. S. GEOLOGICAL SURVEY
CONSERVATION DIVISION - OIL & GAS OPERATIONS
SALT LAKE CITY DISTRICT

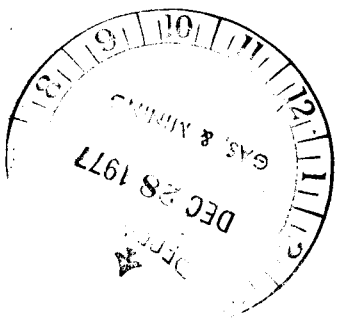
It was my feelings that the waste could be tracked to existing sewage facilities or disposed of onsite in a septic tank or other suitable means. MR Fentress would be agreeable to our suggestions or make a suggestions for our approval, such as covered pit (cesspool), to be ~~covered~~ buried upon Abandonment. Due to the Temporary Need for Camp, a cesspool treated with chemical prior to Abandonment may be all that is needed.

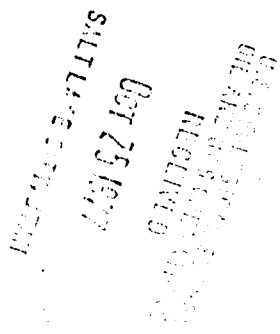
The size should be ~~as~~ Large enough to contain fluid and constructed in such away not to be a HAZARD.

11/25/77

Additional Input:

ON NOV 17, And ON site inspection was MAde for Bishop Springs #2 & 3. THE OPERATOR WAS Agreeable to moving proposed CAmp to SE/SE/4 sec 6, The original site would present possible Hazards to men & equipment due to proximity of CAmp to drill site. Subject to BLM Approval (Coral given at onsite) the site could be moved to sec 6 and would Lessen ANy potential hazards to men & equipment. The site is level, would require only devegitation for parking & Storage. The site should be able to be revegitated After use As old drill site has had natural revegitation (Ref. Sundry Notice Nov 18, 77 -





May 4, 1978

MEMO TO FILE:

Re: Tiger Oil Company
Well No. Bishop Springs Unit #1
Sec. 8, T. 16S., R. 17W.
Millard County, Utah

A visit was made to the above proposeddrillsite. As of this time, no rig has moved in, yet all the necessary location work has been completed.

PATRICK L. DRISCOLL
CHIEF PETROLEUM ENGINEER
DIVISION OF OIL, GAS, & MINING

PLD/ksw

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL [X] GAS WELL [ ] OTHER

2. NAME OF OPERATOR
Edward Mike Davis d/b/a Tiger Oil Company

3. ADDRESS OF OPERATOR
1920 Colorado State Bank Bldg., Denver, Colo. 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
2629' FSL 5310' FEL (re-surveyed)

5. LEASE DESIGNATION AND SERIAL NO.
U-26743

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Federal

9. WELL NO.
#1-USA Bishop Springs

10. FIELD AND POOL, OR WILDCAT
wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
8-T16S-R17W

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
5792' ground

12. COUNTY OR PARISH
Millard

13. STATE
Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]	(Other)			[ ]
(Other) Status Report			[ ]				

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

This Sundry notice is filed with U.S.G.S., B.L.M., Utah Div. O&G Mining that Operator has been encountering extreme problems getting a drilling rig in shape to move on to the location. Operator does intend to get onto the location within the next two to four months, wich might also allow for a cooler weather condition.

Should there be any problems with this extention, please notify:
George H. Fentress, Agent Representative for E.M. Davis
P. O. Box 113, Wheat Ridge, Colo. 80033 Ph: (303) 4230835 or Res. 279-4880
since the Denver Office address above might not have answers to conditions, nor have the files in the matter.

RECEIVED
AUG 3 1978
OIL & GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED George H. Fentress TITLE Professional Geologist and Engineer Agent Representative DATE August 1, 1978

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

GEORGE H. FENTRESS

Professional Geologist & Engineer

Well Site Geology
Well Completions
O. & G. Operations
Evaluations & Prospects
Environmental Impacts

Off: Box 113 (3726 Pierce)
Wheat Ridge, Colo. 80033
(303) 423-0835
Res: 14600 Foothill Rd.
Golden, Colo. 80401
(303) 279-4880

GEORGE H. FENTRESS

GEOLOGICAL ENGINEER

mail all correspondence to:
OFFICE
P.O. Box 113
Wheat Ridge, Colorado 80033
Phone (303) 423-0835

Residence
14600 Foothill Road
Golden, Colorado 80401
Phone (303) 279-4880

November 17, 1978

Ed Guynn, Distr Engr
U. S. Geological Survey
8440 Federal Bldg.
Salt Lake City, Utah 84138

CIRCULATE TO:
DIRECTOR ☒
PETROLEUM ENGINEER ☐
MINE COORDINATOR ☐
ADMINISTRATIVE ASSISTANT ☐
ALL ☐
RETURN TO Kathy FOR FILING
Kathy-Well file

RE: Lease U-26743
E. M. Davis, d/b/a Tiger Oil
#1-USA Bishop Springs
2629' FSL 5310' FEL
Sec. 8-16S-17W
Millard Co., Utah
an OWDD.

Dear Mr. Guynn:

On August 1, 1978 I filed with your office Form 9-331 as a status report to extend the application to drill the above well.

I am advised by Tiger Oil Company that they will be on location January or February, 1979.

They have been building a rig in California and it has taken considerably longer than they anticipated.

If there is any problem with this extension of time, please advise me.

Best wishes!

George H. Fentress
Agent Representative for
Tiger Oil Company

cc. Utah Div. O&G&Mining
B.L.M. Fillmore
Harvey German, Area Mgr. Tiger

clear - I hope our permit still ok on this #17

RECEIVED
NOV 20 1978
DIVISION OF OIL, GAS, & MINING

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: UT-26743

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: --

1a. TYPE OF WORK: DRILL ☐ DEEPEN ☒ PLUG BACK ☐

7. UNIT AGREEMENT NAME: --

b. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ OTHER — SINGLE ZONE ☐ MULTIPLE ZONE ☐

8. FARM OR LEASE NAME: Federal

2. NAME OF OPERATOR: E. M. Davis d/b/a Tiger Oil Company

9. WELL NO.: #1 USA Bishop Springs

3. ADDRESS OF OPERATOR: C/O George H. Fentress, Agent
P. O. Box 113, Wheat Ridge, Colorado 80033

10. FIELD AND POOL, OR WILDCAT: Wildcat

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 2629' FSL 5130' FEL (re-surveyed)

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 8-T16S-R17W

At proposed prod. zone: Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 105 miles east of Ely, Nevada, or 134 miles W. of Delta, Ut

12. COUNTY OR PARISH: Millard

13. STATE: Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
150'	2,559.00	80-acres
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
none	17,500'	rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 5792' ground by Powers

22. APPROX. DATE WORK WILL START*: May 12, 1979

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
---	13 3/8" new	54.5 J-55	522	425 sx reg. cement
12 1/4"	9 5/8" new	36# K-55	5,000	400 sx reg. cement
8 3/4"	5 1/2" new	20#-17# N-80	17,500	500 sx 50-50 Posmix

1. Re-enter old Gulf hole, remove 4' marker, drill cement.
2. Ream old hole of heavy mud to old total depth of 9,058'.
3. Drill hole to 17,500' to Pre-Cambrian and test all shows oil or gas.
4. B.O.P's will be installed and tested as set out in Exhibit "C" and #5 of Exhibit D of previously submitted NTL-6, as approved 12/27/'77.
5. Electric logs will be run as noted in #8 of Exhibit D of NTL-6.
6. If the anticipated oil or gas is found economically, then casing will be run as above. The intermidiate string of casing given above will be run, provided the hole as reamed is in bad condition, or as approved.
7. All Exhibits "A" through "H" were attached to the original proposal as approved, including 10-point program, B.O.P., multipoint surface use, access maps, rig and drill pad layouts. Supplemental plans were proposed in the event a camp was to be used.
8. This Form is re-filed to designate continued plan to drill well.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. George H. Fentress

SIGNED George H. Fentress TITLE Agent Representative for Tiger Oil Company DATE February 13, 1979

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

GEORGE H. FENTRESS

GEOLOGICAL ENGINEER

mail all correspondence to:

OFFICE
P.O. BOX 113
Wheat Ridge, Colorado 80033
3726 Pierce St., Suite #207
Phone (303) 423-0835

Residence
14600 Foothill Road
Golden, Colorado 80401
Phone (303) 279-4880

February 13, 1979

Bill Martens, Ass't Distr. Eng'r
U. S. Geological Survey
8440 Federal Bldg.
Salt Lake City, Utah 84138

RE: Tiger Oil Co.
#1 USA Bishop Springs
Sec. 8-16S-17W
Millard Co., Utah
Lease U-26743

Dear Bill:

As discussed with you by phone today, I enclose a revised up-dated copy of Form 9-331C on the above well, together with the Archeological report covering wells #1, #2, and #3, and other data.

You have advised that this 9-331C should be filed every 90-days in order to keep the drilling intention open. Therefore, in the event Tiger Oil is not on location on or before May 13, 1979, I or someone shall file another report, such as this.

I further appeciate your clarification that Form 9-329-1 is only filed monthly "after the well has spudded".
That Form 9-331 Sundry Notices is filed "only if there is a change in plans or operations".
And, that Form 9-331C is filed with your Salt Lake City Office with the NTL-6 reports, and "every 90-days thereafter until drilling operations have commenced". Some of these filings are slightly different from other offices and I wished to clarify this herewith.

Should you need any other information relative to the delay in commencement of operations by Tiger Oil, Please so advise me.
It is unfortunate that a drilling rig has merely not been available for this commencement.

Best wishes!

George H. Fentress
Agent for Tiger Oil

cc. Ed White, Tiger Oil, Houston
Utah State Div. Oil & Mining

February 25, 1980

Tiger Oil Co.
George H. Fentress
P.O. Box 113
Wheat Ridge, Colorado 80033

Re: Well No.Bishop Springs #1
Sec. 8, T. 16S, R.17W
Millard county, Utah

Gentlemen:

In reference to above mentioned well, considerable time has gone by since approval was obtained from this office.

This office has not received any notification of spudding. If you do not intend to drill this well, please notify this Division. If spudding or any other activity has taken place, please send necessary forms. If we do not hear from your company within fifteen (15) days, we will assume you do not intend to drill this well and action will be taken to terminate the application. If you plan on drilling this location at a later date, please notify as such.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

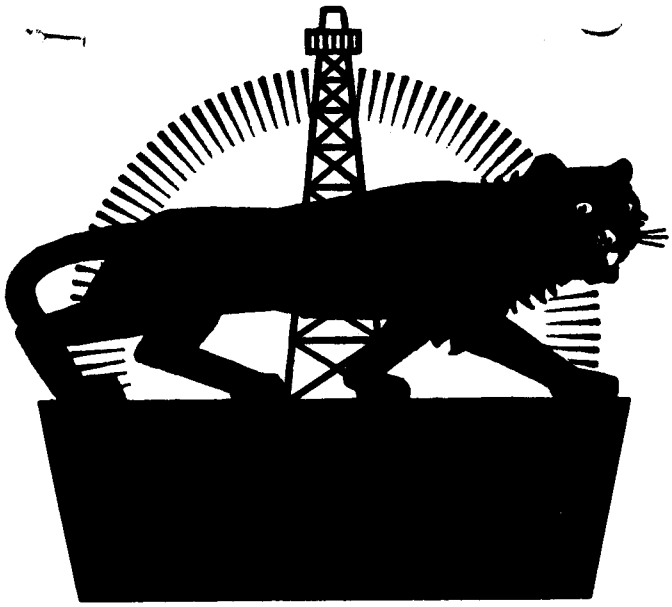
DIVISION OF OIL, GAS, AND MINING

Janice Tabish

JANICE TABISH
CLERK TYPIST

* TIGER OIL INFORMED THIS DIVISION ON 2-28-80 that they INTEND ON SPUDDING IN JULY, 80

PHONE (713) 629-9550



March 11, 1980

State of Utah
Dept. of Natural Resources
Div. of Oil, Gas, and Mining
1588 West North Temple
Salt Lake City, Utah 84116

Attn: Janice Tablish
Clerk Typist

Ref: Well No. Bishop Springs #1
Sec. 8, T16S, R17W
Millard County, Utah

Dear Janice:

Just received your letter concerning the permit to reenter and drill deeper the subject well. We still have plans to drill the well, but are further delayed on rig availability. Request an extension on the permit to July 6, 1980, so it will be compatible with our present Federal Permit.

Sincerely yours,

E. H. White
Chief Engineer

EHW:dfs

SUPPLEMENTARY NOTICE

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121

U.S.G.S.
8440 Federal Bldg.
125 So. State St.
Salt Lake City, Utah 84138

A notice to you dated June 4, 19 79, stating the intention to deepen (Drill, rework, abandon), Well No. 1-USA Bishop Spring, API No. _____,
Sec. 8, T. 16S, R. 17W, S.L. B. & M., Wildcat Field,
Millard County, Utah, should be amended because of changed conditions.

The present condition of the well is as follows:

Total depth 9058'

Complete casing record including plugs and perforations:

13 3/8" - 54#, J-55 C. @ 522' w/bad pipe @ 60'.
Cmt. plug from 494' - 544'.

RECEIVED
MAY 5 1980
DIVISION OF
OIL, GAS & MINING

APPROVED BY THE DIVISION OF
OIL, GAS, AND MINING
DATE: 5-22-80
BY: M. J. Minder

We now propose

1. Clean out to 542' & mill out bad 13 3/8" @ 60'.
2. Run 9 5/8", 40#, S-95 & N-80, LT&C used casing to 542'.
3. Cmt. 9 5/8" to bring cmt. to surface outside csg.
4. C.O. cmt. to 20' above shoe & test csg. & BOE to 1500 psi.
5. C.O. cmt., shoe & old hole to 9058' (T.D.).
6. Drill new 8 3/4" hole as per approval of July 6, 1979.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address P.O. Box 3130 (Street)
Ventura (City) Calif. (State) 93006 (Zip)
Telephone Number (805) 644-8261
Rig Ph. # 1-702-234-7302

Edward Mike Davis/DBA Tiger Oil Co. (Name of Operator)
By Edward P. Clawson 4- (Name) (Date)
Type of Organization Individual (Corporation, Partnership, Individual, etc.)

cc: Ed White & Utah Div. of Oil, Gas & Mining.

(3162.3 4-76-3581-SM)

9-331
1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☐ other Wildcat

2. NAME OF OPERATOR
E. M. Davis - DBA Tiger Oil Co.

3. ADDRESS OF OPERATOR
Suite 1500 Greenway Plaza East Houston Texas

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 2629' N & 5130' W of SE Cor Sec 8
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U.S. 069312

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

9. WELL NO.
Bishop Springs #1

10. FIELD OR WILDCAT NAME

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 8, T16S, R18W, SLB&M

12. COUNTY OR PARISH
Millard

13. STATE
Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5,789' KB

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	☐		☐
FRACTURE TREAT	☐		☐
SHOOT OR ACIDIZE	☐		☐
REPAIR WELL	☐		☐
PULL OR ALTER CASING	☐		☐
MULTIPLE COMPLETE	☐		☐
CHANGE ZONES	☐		☐
ABANDON*	☒		☐
(other)			

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

Note: No hydrocarbon shows encountered.

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

1) Ran open ended DP to 13,499' & pumped in 85 c.f. 1:1 G Poz + 2% gel + 0.6% HR-7 to equalization @ 13,299'.

2) Pulled to 10,501' & pumped in 85 c.f. of 1:1 G-Poz + 2% gel + 0.6% HR-7 to equalization @ 10,301'.

3) Pulled to 7,699' & pumped in 85 c.f. 1:1 G-Poz + 2% gel to equalization @ 7,499'.

4) Pulled to 5,160' & pumped in 65 c.f. 1:1 G-Poz + 2% gel to equalization @ 5,010'.

5) Pulled to 2,155' & pumped in 85 c.f. 1:1 G-Poz + 2% gel + 3% $CaCl_2$ to equalization @ 1,955'.

6) Pulled to 594' & pumped in 50 c.f. 1:1 G-Poz + 2% gel + 3% $CaCl_2$ to equalization.

Note: This abandonment procedure is as per discussion w/R. Henricks of USGS - Salt Lake City

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Floyd R. Clawson TITLE Division Manager DATE June 26, 1980

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

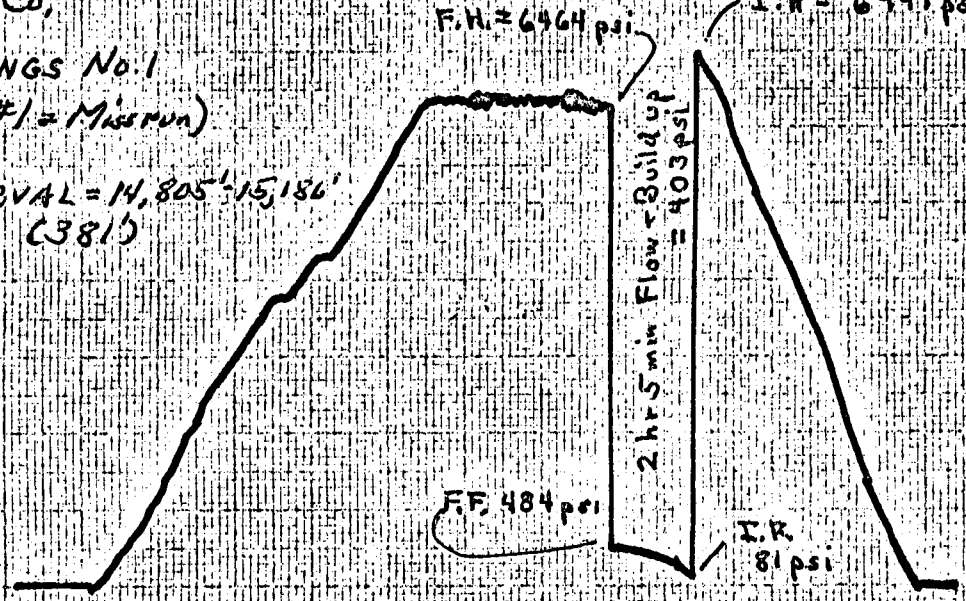
5-8-80

TIGER OIL CO.

BISHOP SPRINGS No. 1

DST #2 (#1 = Misrun)

TEST INTERVAL = 14,805'-15,186'
(381')



T.D. = 15,186'; Triple Packer Set @ 14805' (Btm Pkr). Used 0' cushion. Took 2 hr. 5 min. flow test. Had 10 min weak blow then 1 hr. 50 min dead at surface. Tried to shut in tool & packers failed allowing mud to surge thru test tool. Tools drug coming out of hole. Found 2/3 of rubber gone from packers and all packers torn up. Pressure data from top chart showed I.H. = 6997 psi; I.F. = 81 psi; F.F. = 484 psi; 403 psi build up which occurred thruout test in spite of no surface indication during last 1 hr. 50 min. Fluid in drill collars below reversing tool was mud w/ no evidence of oil or water. Note: Rat hole volume below packers was 22 bbls. - Calculated fluid entry because of build up was 6 bbls.; therefore, fluid recovered in collars was probably rat hole instead of formation fluid.

HALLIBURTON - TEST CO. - TESTOR: RANDY RIPPLE

TEST REPORT BY: F. L. CLAWSON

A Division of HALLIBURTON Company
2400 West Loop South, P. O. Box 22605
Houston, Texas 77027 A/C 713 671-4800

API WELL NO.	STATE	COUNTY	WELL	S/T

OPERATOR: Tiger Oil
ADDRESS: Ventura Ca
REPORT FOR MR.: Floyd Clawson

CONTRACTOR: Tiger Oil
ADDRESS: Rig
REPORT FOR MR.: Carl Bolton

RIG NO.: 38
SPUD DATE: 4-10-80
SECTION, TOWNSHIP, RANGE: 8 26S 17E

WELL NAME AND NO.: Bishop Springs #1
FIELD OR BLOCK NO.: Wildcat
COUNTY, PARISH OR OFFSHORE AREA: Millard
STATE/PROVINCE: Utah

OPERATION	CASING	MUD VOLUME (BBL)	CIRCULATION DATA
PRESENT ACTIVITY	SURFACE IN. AT FT.	HOLE / PITS	PUMP SIZE X IN.
BIT SIZE (IN.) / NO.	INTERMEDIATE IN. AT FT.	TOTAL CIRCULATING VOLUME	PUMP MAKE / MODEL
DRILL PIPE SIZE / TYPE	PRODUCTION OR LINER IN. AT FT.	IN STORAGE / WEIGHT	BBL./STROKE STROKE/MIN.
DRILL COLLAR SIZE / LENGTH	MUD TYPE: Bottoms up From DST		BBL./MIN.

ANNULAR VEL. (FT./MIN.)
OPPOSITE DP
OPPOSITE COLLAR
CIRCULATING PRESSURE PSI
BOTTOMS UP (MIN.)
SYSTEM TOTAL (MIN.)

Sample from ☑ Flowline ☐ Pit
Flowline Temperature °F

MUD PROPERTIES			BEFORE DST
Time Sample Taken			
Depth (ft)			
Weight ☑ (ppg) ☐ (lb/cu ft)	8.8		8.8
Mud Gradient (psi/ft)			
Funnel Viscosity (sec/qt) API at °F	48		47
Plastic Viscosity cp at °F	30		16
Yield Point (lb/100 sq ft)	40		15
Gel Strength (lb/100 sq ft) 10 sec/10 min	15/20	/	6/16
pH ☐ Strip ☐ Meter	8.5		9.0
Filtrate API (ml/30 min)	8.4		6.4
API HP HT Filtrate (ml/30 min) at °F	—		—
Cake Thickness 32nd in API ☐ HTHP ☐	3		2
Alkalinity, Mud (Pm)	—		—
Alkalinity, Filtrate (P_f/M_f)	.2/.3	/	.4/1.9
Salt ☐ppm ☐ppg Chloride ☑ppm ☐ppg	500		700
Calcium ☑ ppm ☐ Gyp ppb	Tr		Tr
Sand Content (% by Vol)	2%		Tr.
Solids Content (% by Vol)			
Oil Content (% by Vol)			
Water Content (% by Vol)			
Methylene Blue Capacity (ml/ml Mud)			
Methylene Blue (lb/bbl Bentonite Eq)			

EQUIPMENT

	SIZE	HRS/TOUR		SIZE	HRS/TOUR
Centrifuge			Desilter		
Degasser			Shaker		
Desander			Other		

DAILY COST
CUMULATIVE COST

MUD PROPERTIES SPECIFICATIONS

WEIGHT	VISCOSITY	FILTRATE

BY AUTHORITY ☐ OPERATOR'S WRITTEN ☐ DRILLING CONTRACTOR ☐ OPERATOR'S REPRESENTATIVE ☐ OTHER

RECOMMENDED TOUR TREATMENT

- ☐ IMCO BAR
- ☐ IMCO GEL
- ☐ IMCO BRINEGEL
- ☐ IMCO RD-111
- ☐ IMCO VC-10
- ☐ IMCO THIN
- ☐ IMCO CAUSTIC SODA
- ☐ IMCO M D
- ☐ IMCO POLY RX
- ☐
- ☐

REMARKS: Mud Sat 24 hrs

Has weak Sulfur odor

IMCO REPRESENTATIVE | HOME ADDRESS | TELEPHONE

OPERATOR | WAREHOUSE LOCATION | TELEPHONE

Form 515 Rev. 5-M-2-80
Printed in USA

WELL SUMMARY REPORT

SUBMIT IN DUPLICATE

RECEIVED
JUL 02 1980
DIVISION OF OIL, GAS & MINING

Operator Tiger Oil Company, Well No. Bishop Springs #1, API No. _____,

Sec. 8, T. 16S, R. 18W, S.L. B. & M., Wildcat Field, Millard County.

Location 2624' N & 5130' W of SE Corner Sec. 8
(Give surface location from property or section corner, or street center line and/or lambert coordinates)

_____. Elevation of ground above sea level 5768 feet.

All depth measurements taken from top of K.B. which is 21 feet above ground.
(Derrick Floor, Rotary Table or Kelly Bushing)

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Date 6/27/80 Signed Floyd L. Clawson

Dick Sneider/J.D. McMullen (Engineer or Geologist) Title Engineer

Commenced ~~drilling~~ work 4/10/80

Completed drilling 6/23/80

Total depth (1st hole)_____(2nd)_____(3rd)_____

Present effective depth 16,058' w/plugs to surface

~~Junk~~ Geol. Markers (Cont.)

Kanosh Sh. 11,054', Juab 11,424', Wahwah 11,674', Fillmore 11,988', House L.S. 13,694', Lava Dam 14,776'.

Commenced producing P&A (Date) Flowing/gas lift/pumping (Cross out unnecessary words)

GEOLOGICAL MARKERS	DEPTH
Laketown L.S.	8982'
Fishhaven Dol.	9312'
Eureka Quartsite	10,096'
Crystal Peak Dol.	10,325
Lehman	10,692'

Formation and age at total depth Lava Dam -Cambro-Ordovitian

Name of producing zone n/a

	Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressur
Initial production	P & A	Dry hole				
Production after 30 days						

CASING RECORD (Present Hole)

Size of Casing (A. P. I.)	Depth of Shoe	Top of Casing	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Numbers of Sacks or Cubic Feet of Cement	Depth of Cementing if through perforations
13-3/8"	522'	0'	54#	J-55, ST&C	New		425 sx.	
9 5/8"	542'	0'	40#	N-80 & S-95, LT&C	Used	12 1/4"	340 c.f.	

PERFORATED CASING

(Size, top, bottom, perforated intervals, size and spacing of perforation and method.)

Was the well directionally drilled? No If yes, show coordinates at total depth _____

Electrical log depths 9058' (O.H.) 13,480' 15,186', 15,772' Other surveys Frac Finder, GFDC, & CNL Logs

OG100 (8-78-6SM-3M) ATTACH ONE COPY OF EACH LOG AND SURVEY

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

RECEIVED
JUL 02 1980
DIVISION OF OIL, GAS & MINING

Operator E. M. Davis DBA Tiger Oil Company Field or County Millard
Well Bishop Springs #1, Sec. 8, T 16S, R 18W, SL B. & M.
A.P.I. No. Name Floyd L. Clawson (Person submitting report) Title Div. Manager (President, Secretary or Agent)
Date 6/27/80, 19

Signature

Suite 1500 Five Greenway Plaza East, Houston, Texas 77046 (Address) (713) 629-9550 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
4/10/80	Rigged up and drilled rat hole w/kelly spinner. Installed 1" BOE lines and tested to 1000 psi. Drilled out 15' cement plug. Mud wt. 8.6. Vis. 37.
4/11/80	Tried to drill rat hole w/no progress. GIH w/mill, junk sub, bit & D.C. and hit bridge @ 26'. Cleaned out bridge of rags and clay material from 55'-65'. Circ. came up through cellar and fluid level dropped to 26' and penetration nearly stopped. L.D. mill and junk sub and P.U. 8 3/4" bit and cleaned out from 65'-70'. Bit stuck and packed off. Worked stuck pipe, backed off leaving bit, sub and D.C. in hole (33.6'). Made up jars, screwed into fish and jarred on fish. Jars failed. Backed off leaving bit, sub, D.C., X/O, jars & X/O in hole (53'), stuck @ 70' w/top @ 17'. Mud wt. 9.2. Vis. 37.
4/12/80-4/13/80	While W.O. fishing tools, P.U. dyna drill and drilled 8 3/4" rathole. Shuck stopped @ 8' w/12¼" spade on bottom. Welder cut off spade on shuck. L.D. kelly and backed off of fish at bottom D.C. Dyna drilled and reamed rat hole. Worked shuck into hole and left shuck 8' above floor. RIH with fishing tools (overshot, grapple and lift sub) and jarred on fish w/200,000#. Fish moved 3" and parted on lift sub on top of fishing string. R.U. and ran Dialog and established free point - stuck at bit only. Tried to back off but bumper sub or jars tried to unscrew. Mud wt. 8.6. Vis. 38-29.
4/14/80	Jarred and moved fish 12" when jars failed. Changed jars and jarred fish again, moving fish 1" - jars failed. Backed off @ top of D.C. fish. L.D. jars and P.U. 12¼" bit and RIH and C.O. cement f/27'-29' working down to T.O.F. Regained partial circulation. Circ. and worked pipe. M.U. wash-over assembly (12 1/8" sawtooth mill, ext. drive sub, jars, X/O, kelly) and RIH. Could not get over fish. Changed to 10 3/4" O.D. opensided mill w/scallop bottom. Went over top of fish and worked pipe 9' over fish. Had full circ., then lost fluid to cellar @ 39'. Worked pipe. L.D. fishing tools, P.U. dynadril w/12 ¼" bit, RIH and drilled and reamed rat hole. Worked shuck into rat hole using kelly weight last 5'. Mud wt. 8.7. Vis. 42.
4/15/80	P.U. new jars & 5' extension sub, RIH and worked over fish f/9'-14'. Worked pipe ok. POOH and added 4½' extension and worked over fish f/14'-18½'. L.D. extension sub and P.U. and RIH w/30.87' of 9 5/8" wash pipe. Slipped W.P. over fish and worked over fish to 2' above bottom of fish. Pulled up and had drag f/7' and set down @ 58' or 7' above bottom of fish. POOH and bottom tungsten carbide on scalloped mill was ok, but bottom 2' outside was badly scarred from bad casing. Ran jars and D.C. screwing into fish and pulled fish out of hole w/o setting off jars. RIH w/12 1/8" mill and milled on tight spot f/35'-40' and went in hole to 60' ok. P.U. junk sub and bumper sub. Mud wt. 8.9. Vis. 40.

4/16/80 Drilled out cement f/410'-470'. POOH and found cement, metal, cherty shale in junk sub. RIH and drilled out cement f/470'-535'. Test BOP and choke manifold to 1,000 psi. Drilled out cement and formation f/535'-537'. POOH, L.D. junk sub and RIH w/12 ¼" bit. No tight spots or fill. Reamed f/470'-537'. Drilled out cement and formation f/537'-542'. Mud wt. 8.8. Vis. 46.

4/17/80 Ran 9 5/8", 40#, N-80, & S-95, LT&C to 542' w/insert valve @ 498'. Cemented w/10 bbls. water ahead, 340 c.f. 1:1 G-Poz + 2% gel and 2% $CaCl_2$ + 1/4# flocele per sack. Used 64% excess cement w/10 c.f. cement returns. CIP @ 10:47 a.m. Float failed to hold. Left Haliburton head on casing W.O.C. Tore out BOP and landed casing and nippled up BOP's.

4/18/80 Ran 8 3/4" bit and drilled baffle @ 498' and cement to 530'. Tested BOP, choke manifold and kelly cock to 1,000 psi. Drilled out cement to 542', cleaned out old hole and circ. down to 2,372' w/no bridges or lost circ. Recovered LCM from old hole. Mud wt. 8.7. Vis. 39.

4/19/80-4/21/80 Circ. and clean out to 6182'. Hit sand bridge @ 6192' and cleaned out w/no problems. Swept hole @ 7500' w/gel-sawdust pill. Cleaned out to 9,051' T.D. Changed over to non-dispersed gelex mud w/8.8 ppg. & Vis. 40-35.

4/22/80-4/25/80 Drilled f/9,051'-9,925'. Mud wt. f/ 8.0 - 9.1 and vis. f/37-46.

4/26/80-4/27/80 Drilled f/9,925'-10,236'. Mud wt. 8.8 - 8.9 and vis. 42-53.

4/28/80-4/30/80 Drilled f/10,236'-10,470'. Mud wt. f/9.9-8.9 ppg. and vis. f/40-38.

5/1/80-5/2/80 Drilled f/10,470'-10,702'. Mud wt. 8.9 ppg. and vis. 40-42.

5/3/80-5/6/80 Drilled f/10,702'-11,308'. Inspect drill collars and BHA. Mud wt. 8.9 ppg. and vis. f/45-44.

5/7/80-5/14/80 Drilled f/11,308'-12,581' w/reaming @ 11,820'-11,911'. Reamed f/12,520'-12,581'. Drilled to 12,593'. Mud wt. 8.9 ppg. - 9.0 ppg. and vis. 45-40.

5/15/80-5/19/80 Drilled f/12,593'-13,466'. Mud wt. f/9.2-8.9 ppg. and vis. 41.

5/20/80-5/21/80 R.U. Welex and ran Gamma Frac-Finder Micro-seis, Dual Induction and G-CDN log.

5/22/80 Reamed f/13,409'-13,480'. Measured in and corrected depth (+14') to 13,480'. Drilled to 13,542'. Mud wt. 8.9 ppg. Vis. 40.

5/23/80-5/26/80 Drilled f/13,542'-14,119'. Mud wt. 8.9 - 9.0 ppg. and vis. 42-39.

5/27/80 Drilled f/14,119'-14,181'. Hit tight spots at 13,733' and 13,582'. Drilled to 14,340'. Mud wt. 9.0 ppg. and vis. 40.

5/28/80 Wiper trip. Tight hole pulling out at 13,642'. Drilled to 14,408'. Mud wt. 9.1 ppg. and vis. 48.

5/29/80 Drilled to 14,496'. Mud wt. 8.9 ppg. and vis. 42.

5/30/80 Tight spots @ 13,600' and 13,650'. Drilled to 14,582'. Short trip had tight spots @ 13,600' and 13,585' POOH. Drilled to 14,661'.

5/31/80 Drilled to 14,677' and dropped survey. Tripped 62 stds to retrieve survey and drilled to 14,807'. Tight hole @ 13,600' on short trip. Mud wt. 8.9 and vis. 43.

6/1/80 Drilled to 14,915'. On short trip, tight hole @ 13,690', 13,645' and 13,600'. Drilled to 14,946'. Dropped survey. Tight hole while POOH @ 13,600'.

6/2/80 Changed bit, stab. & keyseat wiper leaving out 3 D.C.'s and 6 jts. heavy weight to lighten hook load. Reamed tight spot f/914'-922' and lost returns. Regained returns and reamed through bridge. Drilled to 15,030'. Mud wt. 8.7 and vis. 44.

6/3/80 Drilled to 15,040'. On short trip, tight spot @ 13,690' and 13,600'. Drilled to 15,114'. On short trip, tight spots @ 13,690'. Drilled to 15,167'. Mud wt. 8.8 and vis. 43.

6/4/80 Drilled to 15,186' w/no tight spots. Mud wt. 8.9 and vis. 42.

6/5/80-6/6/80 Circ. and cond. hole for logging. R.U. Welex and tagged bottom @ 15,190'. Ran Induction, Density and Frac Finder logs. Mud wt. 8.9-8.8. Vis. 42-47.

6/7/80 Attempted D.S.T. #1 f/14,888'-15,186' and packers failed 3 times. P.O.O.H.

6/8/80 W.I.H. w/Drill Stem Test tools and triple packers and R.U. D.S.T. lines and flow tested.

D.S.T. #1 Results:

Weak flow for 10 min. w/no blow last hr. & 50 min. Tried to shut in and packers failed and filled up D.P.

D.S.T. Pressure Results w/2 hr. 5 min. flow period (see attached chart):

IH - 6997 psi
IF - 81 psi
FF - 484 psi
FH - 6464 psi

Lost approx. 200 bbls. mud while tripping and testing (probably in shallow zones). Had to drag and jar tools out and left most of packer rubbers in hole.

6/9/80-6/10/80 R.I.H. to 8,990'. Circ. sawdust pill around and cond. mud. Hole stood full of mud. Finished reaming to bottom. Drilled to 15,346'. Mud wt. 8.8-8.9 and vis. 38-42.

6/11/80 Drilled to 15,492' and hit tight spots on trip @ 14,995' and 14,411' and again on short trip @ 14,995'. Mud wt. 8.8 and vis. 42.

6/12/80 Drilled to 15,625'. Tight spots on short trip @ 14,995'.. Mud wt. 8.9 and vis. 44.

6/13/80 Tight spots @ 15,431'-15,240'. Drilled to 15,753'. Mud wt. 8.9 and vis. 43.

6/14/80-6/15/80 Drilled to 15,772'. No tight spots on short trip. Circ. and cond. for logging. Rigged up Welex and ran Dual Induction and FDC logs. Reamed tight spots @ 12,500'-12,570' and 15,700'-15,772'. Drilled to 15,792'. Mud wt. 9.0 and vis. 45.

6/16/80 Reamed f/15,725'-15,793'. Drilled to 15,804'. Mud wt. 8.8 and vis. 59.

6/17/80 Drilled to 15,994'. No tight spots. Mud wt. 8.9 and vis. 44.

6/18/80 Drilled to 16,058' T.D. Prepared to P & A.

6/19/80 With D.P. @ 13,494', laid 85 cu. ft. of 1:1 G-Poz + 2% gel + 0.6% HR-7 plug f/13,294'-13,494'. With D.P. @ 10,501', laid 85 cu. ft. of 1:1 G-Poz + 2% gel + 0.6% HR-7 plug f/10,301'-10,501'. With D.P. @ 7,699' laid 85 cu. ft. 1:1 G-Poz + 2% gel plug f/7,499'-7,699'.

6/20/80-6/21/80 With D.P. @ 5160', pumped in 65 cu. ft. 1:1 G-Poz + 2% gel to equalization @ 5010'. With D.P. @ 2155', pumped in 1:1 G-Poz + 2% gel + 3% $CaCl_2$ to equalization @ 1955'. With D.P. @ 594', pumped in 50 cu. ft. 1:1 G-Poz + 2% gel + 3% $CaCl_2$ to equalization @ 490'. Cemented with 65 cu. ft. 1:1 G-Poz + 2% gel + 3% $CaCl_2$ through D.P. @ 65'. Tore out BOP, kelly, swivel, etc. Top of cement at surface.

6/22/80-6/23/80 Cleaned pits, laid down derrick, T.O. Mud lines, etc. Released rig @ 4 p.m.

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE* (other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: U 26743

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Federal

9. WELL NO.: #1 - USA Bishop Springs

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 8-T16S-R17W

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ DRY ☒ Other

b. TYPE OF COMPLETION: NEW WELL ☐ WORK OVER ☐ DEEP-EN ☒ PLUG BACK ☐ DIFF. RESVR. ☐ Other

2. NAME OF OPERATOR: E.M. Davis dba Tiger Oil Company

3. ADDRESS OF OPERATOR: Five Greenway Plaza East, Houston, Texas 77046

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: 2629' FSL; 5130' FEL Section 8 (resurveyed)
At top prod. interval reported below
At total depth

14. PERMIT NO.: | DATE ISSUED: 7/6/79

12. COUNTY OR PARISH: Millard | 13. STATE: Utah

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
re-entered 4/10/80	6/17/80	Dry hole-P&A 6/19/80	5792 GR	N/A

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
16,058'	well plugged to surface	None	→	X	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: NONE

25. WAS DIRECTIONAL SURVEY MADE: NONE

26. TYPE ELECTRIC AND OTHER LOGS RUN: Dual Induction Guard, Comp. Dens. Neutron, Micro-Seismogram; Fracture Finder

27. WAS WELL CORED: No

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8"	54.5	522'		475 Sacks	None
9 5/8"	40.0	542'	12 1/8"	340 cf 1 to 1 G-POZ	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
None				

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
None		

31. PERFORATION RECORD (*Interval, size and number*)
None - dry hole no production
Casing set - well plugged and abandoned

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. cement

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
~~13,299; 10,301;~~ 7699	85 c.f. Type G 1:1 POZ
5160	65 c.f. Type G 1:1 POZ
1955	85 c.f. Type G 1:1 POZ
594	50 c.f. Type G 1:1 POZ

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
None	-----	Dry hole

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
-----	-----	-----		-----	-----	-----	-----

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
-----	-----		-----	-----	-----	-----

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*): None - dry hole

TEST WITNESSED BY: None - dry hole

35. LIST OF ATTACHMENTS: None

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED V. W. Sponseller TITLE Engineer DATE 1/30/81

V. W. Sponseller

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.
If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.
Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.
Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.
Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.
Item 29: *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.
Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Ordovician-Eureka	10,094'	10,325'	Quartzite, not tested
Ordovician-Fillmore	12,334'	14,106'	Interbedded limestone and shale, not tested
Upper Cambrian Lava Dam	14,848'	15,250'	Partially dolomitized limestone

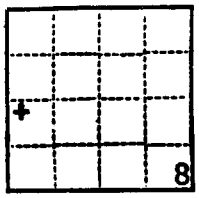
38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Ordovician		
Fish Haven	9,310	9,310
Eureka	10,094	10,094
Crystal Peak	10,325	10,325
Lehman	10,692	10,692
Kanosh	11,054	11,054
Juab	11,424	11,424
Wah Wah	11,674	11,674
Fillmore	12,334	12,334
House	14,106	14,106
Upper Cambrian		
Lava Dam	14,848	14,848

43-027-11476

Form 9-329
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
CONSERVATION DIVISION



Sec. 8
T. 16S
R. 17W
SL Mer.

INDIVIDUAL WELL RECORD

PUBLIC LAND: Date February 9, 1981 Ref. No. 2

Land office Utah State Utah

Serial No. 26743 County Millard

Lessee Merle C. Chambers Field Wildcat

Operator Edward Mike Davis District Salt Lake City

Well No. #1 USA Bishop Springs Subdivision NW SW

Location 2629' FSL & 150' FWL

Reapproved 7-6-79

Drilling approved Dec. 27, 19 77 Well elevation 5792 feet

Drilling commenced April 10, 1980 Total depth 16,058 feet

Drilling ceased May 17, 19 80 Initial production Dry

Oral to Abandon May 19, 19 80 Gravity A. P. I.

Abandonment approved Dec 3, 1985 Initial R. P.

Geologic Formations		Productive Horizons		
Surface	*Lowest tested*	*Name*	*Depths*	*Contents*
Guilmette	Lava Dam			

WELL STATUS

YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1980				spud	TD 16058 ABD							
1985												P&A

REMARKS Geologic Markers: see well file IN STORAGE CAGE.

Casing record: 13 3/8" cc @ 522' w/475 sxs.
9 5/8" cc @ 542' w/340 sxs.

☆U.S. Government Printing Office: 1979 — 680-201/613

July 10, 1981

Tiger Oil Company
Suite 1500 Five Greenway Plaza East
Houston, Texas 77046

Re: Well No. Bishpp Springs #1
Sec. 8, T. 16S, R. 17W
Millard County, Utah

Gentlemen:

This letter is to advise you that the Well Completion or Repompletion Report and Log for the above mentioned well is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, in duplicate, and forward them to this office as soon as possible.

Thank you for your cooperation relative to the above.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

Sandy Bates

Sandy Bates
Clerk-Typist

/lm
Enclosures

STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

July 13, 1982

Tiger Oil Company
Five Greenway Plaza East, Suite 1500
Houston, Texas 77046

Re: Well No. Bishop Springs #1
Sec. 8, T. 16S, R. 17W.
Millard County, Utah

Gentlemen:

According to our records, a "Well Completion Report" filed with this office January 1, 1981, from above referred to well, indicates the following electric logs were run: Dual Induction Guard, Compensated Density Neutron, Fracture Finder Micro-Seismogram. As of todays date, this office has not received these logs.

Rule C-5, General Rules and Regulations and Rules of Practice and Procedure, requires that a well log shall be filed with the Commission together with a copy of the electric and radioactivity logs.

Your prompt attention to the above will be greatly appreciated.

Sincerely,

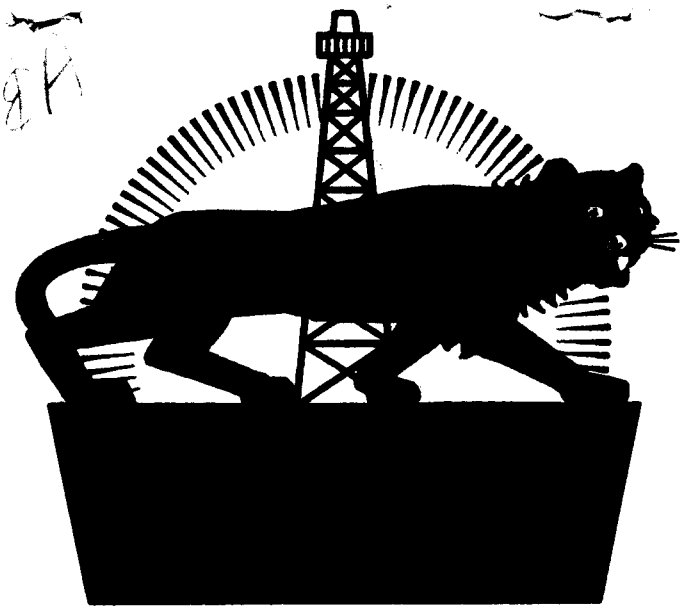
DIVISION OF OIL, GAS AND MINING

Cari Furse

Cari Furse
Clerk Typist

PHONE (713) 629-9550

P&A



July 21, 1982

State of Utah
Natural Resources & Energy
Division Of Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Utah 84114

Re: Bishop Springs #1
Sec. 8, T16S, R17W
Millard County, Utah

Gentlemen:

Per your request of July 13, 1982, please find enclosed the following logs:

Dual Induction Guard
Compensated Density Neutron
Fracture Finder Micro-Seismogram

As you will note, the Fracture Finder Micro-Seismogram log is a field print. We do not have a final print to send you. Also, subsequent to running these logs, well was drilled to a TD of 16,058' but no other additional logs from bottom of hole from 15,772' to 16,058' were run.

Please acknowledge receipt of the enclosed logs by signing below and returning one copy of this letter to our office.

Yours truly,

V. W. Sponseller

ABOVE LOGS RECEIVED THIS

_____ DAY OF _____, 1982

By: _____

PHONE (713) 629-9550

July 29, 1981

Ms. Sandy Bates
State of Utah
Dept. of Natural Resources
Division of Oil, Gas and Mining
1588 West North Temple
Salt Lake City, Utah 84116

Re: Well No. Bishop Springs #1
Sec 8, T16S, R17W
Millard County, Utah

Dear Ms. Bates:

Enclosed are two copies of "Well Completion or Recompletion Report and Log" for the above well, as requested by your letter of July 10, 1981. We apologize for failing to send copies to you when originally filed with U.S.G.S.

Yours very truly,

V. W. Sponseller

VWS/kh
Enc.

11/08/93 D E T A I L W E L L D A T A menu: opt 00

api num:	4302711476	prod zone:	sec	twnshp	range	qr-qr
entity:	99998 : PA/LA/TA		8	16.0 S	17.0 W	NWSW

well name: BISHOP SPRINGS UNIT #1
operator: P0115 : TIGER OIL CO meridian: S
field: 1 : WILDCAT
confidential flag: confidential expires: alt addr flag:

* * * application to drill, deepen, or plug back * * *

lease number:	U-26743	lease type:	1	well type:	OW
surface loc:	2629 FSL 5130 FEL	unit name:			
prod zone loc:	2629 FSL 5130 FEL	depth:	17500	proposed zone:	
elevation:	5792' GR	apd date:	771026	auth code:	C-3
* * completion information * *		date recd:		la/pa date:	
spud date:	800410	compl date:	800619	total depth:	16058'
producing intervals:					
bottom hole:	2629 FSL 5130 FEL	first prod:		well status:	PA
24hr oil:	24hr gas:	24hr water:		gas/oil ratio:	
				api gravity:	

* * well comments:
RE-ENTRY;ORIG APD 9-18-52:

opt: 21 api: 4302711476 zone: date(yymm): enty acct: